

DENR USE ONLY: Paper Report Electronic Data - Email CD (data loaded: Yes / No)

Doc/Event #:

NC DENR

Division of Waste Management - Solid Waste

**Environmental Monitoring
Reporting Form**

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i)).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: _____

Phone: _____

E-mail: _____

Facility name: _____

Facility Address: _____

Facility Permit #: _____

NC Landfill Rule:
(.0500 or .1600)Actual sampling dates (e.g.,
October 20-24, 2006)

| | | | | |
|----------------------|-------------------------|--------------------------|---------------------------------------|--|
| Facility name: _____ | Facility Address: _____ | Facility Permit #: _____ | NC Landfill Rule: (.0500 or .1600) | Actual sampling dates (e.g., October 20-24, 2006) |
|----------------------|-------------------------|--------------------------|---------------------------------------|--|

Environmental Status: (Check all that apply)
 Initial/Background Monitoring Detection Monitoring Assessment Monitoring Corrective Action
Type of data submitted: (Check all that apply)
 Groundwater monitoring data from monitoring wells
 Groundwater monitoring data from private water supply wells
 Leachate monitoring data
 Surface water monitoring data

 Methane gas monitoring data
 Corrective action data (specify) _____
 Other(specify) _____
Notification attached?

- No. No groundwater or surface water standards were exceeded.
- Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
- Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Facility Representative Name (Print)

Title

(Area Code) Telephone Number

Affix NC Licensed/ Professional Geologist Seal

Signature

Date

Facility Representative Address

NC PE Firm License Number (if applicable effective May 1, 2009)

Revised 6/2009

Semi-Annual Detection Monitoring & Statistical Analysis

Prepared for

Surry County Subtitle D Lined MSWLF
Mt. Airy, North Carolina

October 2009

Permit Number: 86-03

MESCO Project Number: G09025.0

Completed on January 6, 2010



Municipal Engineering Services Company, P.A.
Garner, Boone and Morehead City, North Carolina



January 6, 2010

Ms. Jaclynne Drummond
 Solid Waste Section
 Division of Waste Management
 North Carolina Department of Environment and Natural Resources
 401 Oberlin Road, Suite 150
 Raleigh, NC 27605

Re: Water Quality Monitoring Report and Statistical Analysis
 Surry County Subtitle D Lined Landfill
 Permit No. 86-06
 MESCO Project No. G09025.0

Dear Ms. Drummond:

Introduction

The Surry County Subtitle D Lined Municipal Solid Waste Landfill (MSWLF) located near Mount Airy NC, currently operating under permit #86-06 (Phase 1) is required to submit semi-annual compliance reports as a condition of the detection monitoring program. This event was performed on October 19, 2009 in accordance to the semi-annual monitoring schedule prescribed by the NC Solid Waste Section rules/regulations as promulgated in 15A NCAC 13B.1600. The site location topographic map is depicted in the attached Plate 1.

As specified within 15A NCAC 13B.1632(j) and the SWS Environmental Monitoring Report Form this report contains sampling procedures, field and laboratory results, statistical analysis, groundwater and surface water characterization, findings, and conclusion. A list of detections compared to Standards, field data results, a single-day potentiometric map, groundwater flow directions and flow rates table, field observations of the monitoring network table, quality assurance/quality control data, statistical analysis , and full laboratory analytical data results with chains of custody (C-O-C) are also attached.

Sampling Procedure

Municipal Engineering Services Company, P.A. (MESCO) personnel performed this sampling event utilizing portable monitoring methodology in accordance with the site specific Sampling and Analysis Plan (SAP). This event consisted of collection of water samples from six downgradient groundwater monitoring wells (MW-2R, MW-3, MW-4S, MW-4D, MW-5, MW-6R), one background well (MW-1), two surface water locations (SWN-1, SWN-2) and a leachate sample (LAGOON). The only monitoring location not sampled during this event was surface water SWN-3 which was dry. All sampling locations are shown upon the enclosed single-day potentiometric map constructed for the entire facility Plate 2.

All sampling was conducted utilizing methodology outlined in the NCDENR SWS guidance document *Solid Waste Section Guidelines for Groundwater, Soil, and Surface Water Sampling* revised April 2008. The function and integrity of all monitoring locations were visually evaluated, preventive maintenance performed, and documentation is provided in the enclosed Table 3. The depth to water in each well was electronically gaged prior to purging to quantify the static water level. Low flow pumping methodology or baling was utilized to adequately purge the wells to a minimum of three times the volume of standing water in the well or to dryness. During purging field parameters dissolved oxygen, oxidation-reduction potential, and total dissolved solids were recorded in addition to those that are required (pH, specific conductance, temperature). The samples were then immediately placed into laboratory-prepared pre-preserved containers via a new disposable polyethylene bailer. All samples were properly

collected, separated based upon likelihood of potential cross-contamination, kept upon ice, and transported to a NC certified laboratory Pace Analytical Laboratories Inc. (PACE) of Huntersville NC under proper chain of custody (C-O-C) within the specified hold times for each analysis.

Field and Laboratory Results

All of the groundwater and surface water samples were analyzed for the complete Appendix I list of volatile organic compounds (VOCs) via EPA test method 8260B and total unfiltered metals via EPA test method 6010. The leachate sample was also analyzed for the complete required leachate specific list which includes Appendix I parameters, nitrate, phosphorus, chemical oxygen demand, biological oxygen demand, and sulfate. Quality control measures were also implemented during this event which included submittal and subsequent quantification of blanks for the Appendix I list of parameters. All laboratory data and C-O-Cs are presented in Appendix B.

The enclosed Table 4 consists of all field parameter data and it appears to be generally consistent relative to each other and congruent with data historically reported.

All water samples were analyzed down to the laboratory-established Method Detection Limits (MDL) with reference to the values current as of the sampling event. Enclosed Table 1 summarizes all detected constituents detected within groundwater and surface water samples above the Solid Waste Section detection limit (SWSL), Groundwater Protection Standards (GWP), North Carolina Groundwater Standards (2L) or the North Carolina Surface Water Standards (2B). Effective January 1, 2010 the 2L Standards have been raised for ten constituents and lowered for ten constituents. The only change in the latest data set attributed to the 2L Standard change is the concentration of chromium detected in the background well MW-1 is above the Standard.

The only constituents detected in concentrations in exceedance of the 2L Standard from downgradient wells were cadmium within MW-4D and tetrachloroethene (PCE) within MW-2. However, the detection of PCE from sample MW-2 was a low level estimated concentration between the MDL and the SWSL ("j" qualifier). The only 2B exceedance was silver which was detected in extremely low levels within SWN-2. However, the concentration of silver was reported as an estimated concentration between the MDL and the SWSL ("j" qualifier).

No Appendix I constituents were detected in quantifiable concentrations from the leachate LAGOON sample.

Statistical Analysis

Statistical analysis was performed upon all constituents detected in quantifiable concentrations (above SWSL) from the monitoring wells. The statistical comparison between baseline and current groundwater analytical data is consistent with US EPA guidance documents and meets or exceeds the performance criteria specified in 15A NCAC 13B.1362. The complete set of statistical analysis calculations is not included in this document, but can be submitted upon request. The overview of the statistical analysis methodologies, summary tables, graphs, and worksheets are presented in Appendix A.

The numbers and types of metal detections continue to be consistent with historical results. The interwell analysis results conducted upon the detection of cadmium within MW-4D and silver within SWN-2 indicate that the concentration has not exhibited a statistically significant increase (SSI) compared to established background concentrations.

The non-quantifiable detection of silver within the surface water sample SWN-2 is likely natural in origin and not attributed to a release originating from the lined landfill as evidenced by higher concentrations detected within upstream SWN-1 during the previous event and comparable concentrations detected within the background groundwater (MW-1) during this and previous events.

Groundwater and Surface Water Characterization

MESCO prepared a single-day potentiometric map from groundwater elevation data recorded during this event. Groundwater elevations from the lined Phase 2 landfill which is constructed and pending operation were also utilized to construct more accurate potentiometric contours. Groundwater flow rates and directions were also calculated based upon this data and is included in the attached Table 2. The flow directions for the wells monitoring active Phase 1 continue to be to the southeast and flow rates ranged from approximately 326 ft./yr (MW-4S) to 1,820 ft./yr. (MW-6R) averaging 862 ft./yr. All of the streams located upon the facility were visually observed to be of normal flow and height. The flow directions are in a southeast direction towards the Ararat River and are consistent with historical observations, showing no changes that would result in a different interpretation of the groundwater system or hinder the effectiveness of the current monitoring network.

Findings

The laboratory and subsequent statistical analysis appear to indicate that the groundwater and surface waters remain unimpacted by activities at the Surry County Subtitle D Lined MSWLF Phase 1.

Closing

Detection monitoring of the lined MSWLF will continue and the next sampling event is tentatively scheduled for May 2010 at which time the newly constructed Phase 2 will also be monitored. Please contact me either by phone at (919) 772-5393, or by email at jpfohl@mesco.com should you have any questions or concerns regarding this report.

Sincerely,
MUNICIPAL ENGINEERING SERVICES CO., P.A.



Jonathan Pfahl
Environmental Specialist

Enclosures
cc: Mr. Jerry Snow
Surry County

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| | |
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APPENDICIES

| | |
|-----------------|--|
| Appendix A..... | Statistical Analysis |
| Appendix B..... | Laboratory Analysis Report & Chains of Custody |

Plates

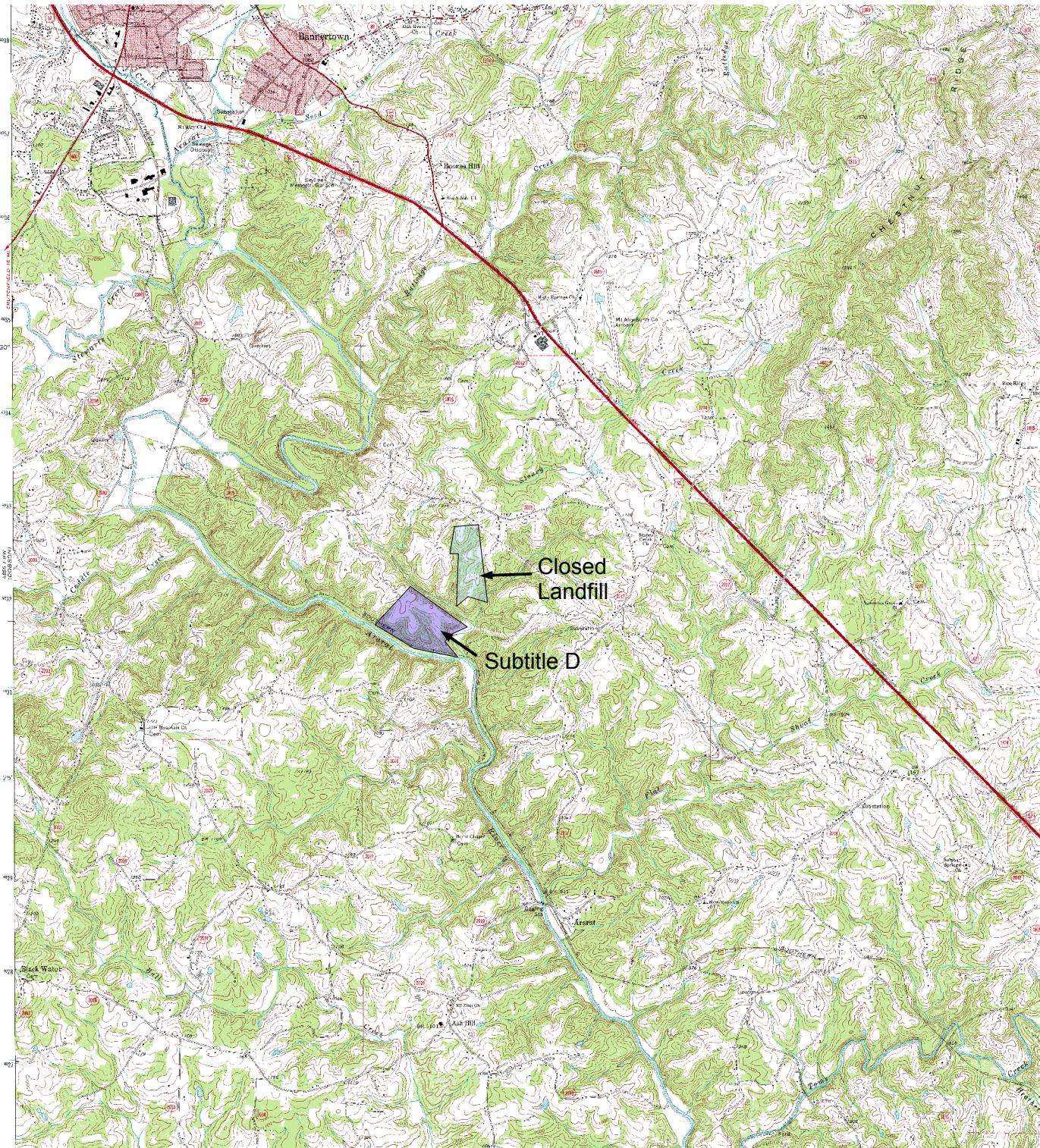
Topographic Map with Site Location

Semi-Annual Sampling Report Surry County Landfill

PLATE 1

| | |
|----------------|-----------------------------|
| Date Completed | 12/09/2009 |
| Created By | M. Clement |
| Project Name | Semi-Annual Sampling Report |
| Site Name | Surry County Landfill |
| Project Number | G09025.0 |

Municipal Engineering Services Company, PA



QUADRANGLE LEGEND

1

0

1 MILE

Primary highway,
hard surface

Light-duty road, hard or
improved surface

Secondary highway,
hard surface

Unimproved road



ROAD CLASSIFICATION



LEGEND

MW-1 (●)
MONITORING WELL
GROUNDWATER ELEVATION (FEET AMSL)
SW-5P
SURFACEWATER SAMPLING POINT

— 1050' — POTENIOMETRIC CONTOUR (CONTOUR INTERVAL = 10 FEET)
— - - - EXISTING PATH
- - - - ESTIMATED EXTENT OF WASTE PRIOR TO JUNE 1, 1999
- - - - ESTIMATED EXTENT OF WASTE 1991 TO JUNE 1, 2008

SCALEHOUSE
WATER SUPPLY WELL

STREAM
EXISTING PATH
(CONTOUR INTERVAL = 5 FEET)

GROUNDWATER FLOW DIRECTION

— - - - - SPRING

SEDIMENT BASIN

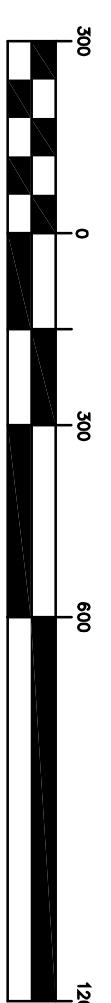
FRENCH DRAIN

NOTE:
*INDICATES WELL SCREENED IN LOWER BEDROCK AQUIFER.
DATA NOT USED IN CONTOURING MAP.

| Surry County Subtitle D MSLWF October 20, 2009 | | | |
|---|-------------------------------|------------------------|-------------------------|
| WELL # | TOP OF PIPE ELEVATION (FT) | DEPTH TO WATER (FT) | WATER ELEVATION (FT) |
| MW-1 | 1127.02 | 61.68 | 1065.34 |
| MW-2 | 936.68 | 13.12 | 923.56 |
| MW-3R | 930.00 | 5.33 | 924.67 |
| MW-4S | 943.23 | 9.03 | 934.20 |
| MW-4D* | 942.80 | 8.53 | 934.27 |
| MW-5 | Needs to be Resurveyed | 43.95 | na |
| MW-6R | 1004.75 | 67.35 | 937.40 |
| MW-8 | 971.03 | 64.97 | 906.06 |
| MW-9S | 982.63 | 34.50 | 918.33 |
| MW-9D* | 982.47 | 36.55 | 915.92 |
| MW-10 | 970.24 | 31.60 | 938.64 |
| MW-11S | 969.09 | 30.57 | 938.52 |
| MW-11D* | Needs to be Resurveyed | 53.62 | na |
| MW-12 | 986.66 | 49.38 | 941.28 |
| MW-13 | 983.13 | 26.88 | 956.25 |
| P2-6S | 1040.27 | 58.15 | 982.12 |
| P2-6D* | 1040.65 | 61.28 | 979.37 |
| P2-11S | 1021.53 | 50.34 | 971.19 |
| P2-11D* | 1021.13 | 49.99 | 971.14 |
| P2-12 | 986.61 | 53.85 | 932.76 |
| MW-A | 1095.51 | 82.01 | 1013.50 |

*Deep (Upper Bedrock) ground water elevations not used in contouring

GRAPHIC SCALE



1 inch = 300 ft.

MUNICIPAL SOLID WASTE LANDFILL FACILITY SURRY COUNTY NORTH CAROLINA

SINGLE-DAY POTENIOMETRIC MAP
(UNCONFINED AQUIFER)

LICENSE NUMBER: C-0281
Municipal
Services
P.O. BOX 97 GARNER, N.C. 27529
(919) 772-5393

Engineering
Company, P.A.
P.O. BOX 828 MOREHEAD CITY, N.C. 28557
(828) 262-1767
P.O. BOX 349 BOONE, N.C. 28607
(252) 726-9481

| | | |
|--|-------------------|--------------------------|
| DATE | BY | REV. |
| DESCRIPTION | | |
| SINGLE-DAY POTENIOMETRIC MAP (UNCONFINED AQUIFER) | | |
| DRAWN BY: S. PATRICK | CHKD BY: J. PRICE | PROJECT NUMBER: G09025.0 |
| PLATE 2 | 1 OF 1 | SHEET NO. |

Tables

Table 1**Detection Scan All Detections above SWSL, GWP, 2L, or 2B****Surry Co. Subtitle D Lined MSWLF**

| Sample ID | Parameter Name ¹ | Sample Date | Result | Unit | MDL ² | SWSL ³ | 2L ⁴ | 2L ⁵ | 2B ⁶ | GWP ⁷ | Exceedance | Preliminary Cause |
|------------------|------------------------------------|--------------------|-------------------------|-------------|-------------------------|--------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------|--------------------------|
| MW-1 | Barium | 10/19/09 | 184 | ug/L | 0.2 | 100 | 2000 | 2000 | | | | |
| MW-1 | Beryllium | 10/19/09 | 3.1 | ug/L | 0.1 | 1 | | | 2 | 1.1 | | B |
| MW-1 | Chromium | 10/19/09 | 42.2 | ug/L | 0.4 | 10 | 50 | 10 | | | | |
| MW-1 | Cobalt | 10/19/09 | 16.7 | ug/L | 0.6 | 10 | | | 70 | | | |
| MW-1 | Copper | 10/19/09 | 95.8 | ug/L | 0.3 | 10 | 1000 | 1000 | | | | |
| MW-1 | Lead | 10/19/09 | 18.6 | ug/L | 4 | 10 | 15 | 15 | | 3.6 | | B |
| MW-1 | Vanadium | 10/19/09 | 34 | ug/L | 0.2 | 25 | | | 3.5 | 30.5 | | B |
| MW-1 | Zinc | 10/19/09 | 135 | ug/L | 0.4 | 10 | 1050 | 1050 | | | | |
| MW-2 | Tetrachloroethene | 10/19/09 | 0.83^j | ug/L | 0.46 | 1 | 0.7 | 0.7 | | 0.13 | | A |
| MW-2 | Vanadium | 10/19/09 | 4.4 ^j | ug/L | 0.2 | 25 | | | 3.5 | 0.9 | | N |
| MW-2 | Zinc | 10/19/09 | 14.3 | ug/L | 0.4 | 10 | 1050 | 1050 | | | | |
| MW-3R | Zinc | 10/19/09 | 10.9 | ug/L | 0.4 | 10 | 1050 | 1050 | | | | |
| MW-4D | Cadmium | 10/19/09 | 1.9 | ug/L | 0.5 | 1 | 1.75 | 1.75 | | 0.15 | | N |
| MW-4D | Zinc | 10/19/09 | 10.8 | ug/L | 0.4 | 10 | 1050 | 1050 | | | | |
| MW-4S | Vanadium | 10/19/09 | 4.3 ^j | ug/L | 0.2 | 25 | | | 3.5 | 0.8 | | N |
| MW-4S | Zinc | 10/19/09 | 34.7 | ug/L | 0.4 | 10 | 1050 | 1050 | | | | |
| MW-6R | Zinc | 10/19/09 | 10.3 | ug/L | 0.4 | 10 | 1050 | 1050 | | | | |
| SWN-2 | Silver | 10/19/09 | 0.28^j | ug/L | 0.1 | 10 | | | 0.06 | 0.22 | | N |
| EB | Methylene Chloride | 10/26/09 | 1.6 | ug/L | 0.97 | 1 | 4.6 | 4.6 | | | | |
| FB | Methylene Chloride | 10/26/09 | 1.4 | ug/L | 0.97 | 1 | 4.6 | 4.6 | | | | |

¹ Table contains only constituents detected above SWSL, GWP, 2L, or 2B² MDL = Method Detection Limit³ SWSL = Solid Waste Section Reporting Limit (Current as of Sampling Event)⁴ 2L = North Carolina 15A NCAC 2L Groundwater Quality Standard (Current as of Sampling Event)⁵ 2L = North Carolina 15A NCAC 2L Groundwater Quality Standard (Current as of January 1, 2010)⁶ 2B = North Carolina 15 NCAC 2B Surface Water Quality Standard for this Specific Stream Classification (Current as of Sampling Event)⁷ GWP = Groundwater Protection Standard (Current as of Sampling Event)^j =The reported value is estimated & between the laboratory MDL & the SWSL, adjusted for actual sample preparation data and moisture content.

A= Artifact

N = Natural

B = Background

L = Leachate

LFG = Landfill Gas

NE = Not Established

BOLD = Concentration >2L, or 2B Standard (Current as of Sampling Event)

Table 2
Hydrologic Properties at Monitoring Well Locations
Surry Co. Subtitle D Lined MSWLF

| Monitoring Well | Hydraulic Conductivity (cm/sec) | Effective Porosity (%) | Hydraulic Gradient | Flow Rate (ft/yr) | Flow Direction | Water Table Depth (ft) | Water Table Elevation (ft) | Screened Interval Lithology |
|-----------------|---------------------------------|------------------------|--------------------|-------------------|----------------|------------------------|----------------------------|-----------------------------|
| MW-1 | 2.45E-04 | 3% | 0.065 | 549 | S03W | 61.68 | 1065.34 | Fractured Rock |
| MW-2 | 3.20E-04 | 3% | 0.080 | 879 | S20E | 13.12 | 923.56 | Fractured Rock |
| MW-3R | 3.20E-04 | 3% | 0.067 | 736 | S24E | 5.33 | 924.67 | Fractured Rock |
| MW-4S | 1.50E-04 | 3% | 0.063 | 326 | S31E | 9.03 | 934.2 | Sandy Silt & Fractured Rock |
| MW-4D | 1.59E-04 | 3% | - | - | - | 8.53 | 934.27 | Fractured Rock |
| MW-5 | 3.20E-04 | 3% | - | - | - | - | - | Fractured Rock |
| MW-6R | 3.20E-04 | 3% | 0.165 | 1820 | S19E | 67.35 | 937.4 | Fractured Rock |
| MW-8 | 1.08E-03 | 3% | 0.152 | 5674 | S12E | 64.97 | 906.06 | Fractured Rock |
| MW-9S | 7.45E-04 | 3% | 0.066 | 1698 | S14E | 34.50 | 918.33 | Fractured Rock |
| MW-9D | 1.07E-05 | 3% | - | - | - | 36.55 | 915.92 | Fractured Rock |
| MW-10 | 1.43E-04 | 3% | 0.040 | 197 | S06E | 31.60 | 938.64 | Fractured Rock |
| MW-11S | 6.19E-05 | 3% | 0.058 | 123 | S20W | 30.57 | 938.52 | Fractured Rock |
| MW-12 | NA | 3% | 0.336 | NA | S17W | 49.38 | 947.28 | Fractured Rock |
| MW-13 | 2.71E-03 | 3% | 0.131 | 12242 | S27W | 26.88 | 956.25 | Fractured Rock |
| P2-6S | 1.65E-02 | 3% | 0.219 | 124886 | S21W | 58.15 | 982.12 | Fractured Rock |
| P2-6D | 1.43E-07 | 3% | - | - | - | 61.28 | 979.37 | Fractured Rock |
| P2-11S | NA | 3% | 0.214 | NA | S02W | 50.34 | 971.19 | Fractured Rock |
| P2-11D | 4.06E-05 | 3% | - | - | - | 49.99 | 971.14 | Fractured Rock |
| P2-12 | 5.91E-07 | 3% | 0.252 | 5 | S11E | 53.85 | 932.76 | Fractured Rock |
| MLW-A | NA | NA | NA | NA | S59E | 82.01 | 1013.5 | Fractured Rock |

NOTE: Hydraulic Conductivities and Effective Porosity are derived from Slug Tests previously conducted by MESCO.

Hydrologic Gradient taken from water levels taken on October 20, 2009.

Flow rate (Q) is defined by the equation:

where

$$Q = - \frac{K}{n_e} \cdot \frac{dh}{dl}$$

K = hydraulic conductivity

n_e = effective porosity

dh = head difference

dl = horizontal distance

Table 3**Field Observations of Monitoring Locations****Surry Co. Subtitle D Lined MSWLF****October 19, 2009 Sampling Event**

| Sample Location | Viable Monitoring Location | Lack of Any Evidence of Tampering | Locked on Arrival & Departure | Hinge/Hasp Operational | Tagged or Labeled | Concrete Surface Pad Effective | Degree of Visual Turbidity of Collected Sample | Comments |
|-----------------|----------------------------|-----------------------------------|-------------------------------|------------------------|-------------------|--------------------------------|--|--------------------------------------|
| MW-1 | Yes | Yes | Yes | Yes | Yes | Yes | Clear | Tag Replaced |
| MW-2 | Yes | Yes | Yes | Yes | Yes | Yes | Clear | Tag Replaced, Hinge Repaired |
| MW-3R | Yes | Yes | Yes | Yes | Yes | Yes | Clear | Tag Replaced |
| MW-4S | Yes | Yes | Yes | Yes | Yes | Yes | Clear | |
| MW-4D | Yes | Yes | Yes | Yes | Yes | Yes | Clear | |
| MW-5 | Yes | Yes | Yes | Yes | Yes | Yes | Clear | Previously repaired resurvey pending |
| MW-6R | Yes | Yes | Yes | Yes | Yes | Yes | Clear | |
| LAGOON | Yes | Yes | Yes | Yes | Yes | Yes | Clear | |
| MW-8 | Yes | Yes | Yes | Yes | Yes | Yes | Clear | Phase 2 Well Yet to Accept waste |
| MW-9S | Yes | Yes | Yes | Yes | Yes | Yes | Clear | Phase 2 Well Yet to Accept waste |
| MW-9D | Yes | Yes | Yes | Yes | Yes | Yes | Clear | Phase 2 Well Yet to Accept waste |
| MW-10 | Yes | Yes | Yes | Yes | Yes | Yes | Clear | Phase 2 Well Yet to Accept waste |
| MW-11S | Yes | Yes | Yes | Yes | Yes | Yes | Clear | Phase 2 Well Yet to Accept waste |
| MW-11D | Yes | Yes | Yes | Yes | Yes | Yes | Clear | Phase 2 Well Yet to Accept waste |
| MW-12 | Yes | Yes | Yes | Yes | Yes | Yes | Slight | Phase 2 Well Yet to Accept waste |
| MW-13 | Yes | Yes | Yes | Yes | Yes | Yes | Slight | Phase 2 Well Yet to Accept waste |
| SWN-1 | Yes | - | - | - | - | - | Clear | Moderate gage height & Flow |
| SWN-2 | Yes | - | - | - | - | - | Clear | Moderate gage height & Flow |
| SWN-3 | No | - | - | - | - | - | - | Dry Not Sampled |
| SWN-4 | No | - | - | - | - | - | - | Phase 2 Dry Not Sampled |
| MLW-A | Yes | Yes | Yes | Yes | Yes | Yes | not sampled | WLR only |
| P2-6S | Yes | Yes | Yes | Yes | Yes | Yes | not sampled | WLR only |
| P2-6D | Yes | Yes | Yes | Yes | Yes | Yes | not sampled | WLR only |
| P2-11S | Yes | Yes | Yes | Yes | Yes | Yes | not sampled | WLR only |
| P2-11D | Yes | Yes | Yes | Yes | Yes | Yes | not sampled | WLR only |
| P2-12 | Yes | Yes | Yes | Yes | Yes | Yes | not sampled | WLR only |

Any unusual field conditions, observations, or events:

Baseline #2 for Phase 2 performed in conjunction. Phase 2 yet to commence operation as of 10/19/09.

Table 4
Summary of Field Data
Surry County Subtitle D Lined MSWLF

Sampling Data Sheet



Project: Surry Co Subtitle D Lined MSWLF, Ph. 1

Samplers: J. Pfohl Page 1 of 1

| Monitoring Point | Sample Date | Sample Time | Sampling Parameters | | | | | | Water Quality Parameters | | | | | | | | JLR ETOP 10/19/09 | |
|------------------|-------------|-------------|------------------------------|-----------------------------------|---------------------|-------------|-----------------------|--------------------|--------------------------|-----------|-----------|-----|------|----------|------------------------|------------|-------------------------|---|
| | | | Depth to Water (BTOP) Static | Lab Parameters to be analyzed for | Volume Purged (Gal) | Sample Type | Goes Dry During Purge | Comments | Total Depth | Cl (mg/l) | DO (mg/L) | ORP | pH | Temp. °C | Specific Cond. (us/cm) | TDS (mg/L) | Turbidity | |
| MW-1 | 10/19/09 | 4:30 | 6:70 | I VOCs & Metals | 2 | DB | Y | SLOW recharge | 70.3 | NR | 3.4* | 183 | 6.12 | 13.7 | 80 | 30 | 39047 | Ø |
| MW-2 | 10/19/09 | 4:00 | 13:13 | I VOCs & Metals | 8 | P&DB | N | | 26.74 | NR | 5.0 | 191 | 6.03 | 13.5 | 280 | 130 | 8.63 | Ø |
| MW-3R | 10/19/09 | 8:00 | 5.27 | I VOCs & Metals | 11 | P&DB | N | | v 26 | NR | 1.1 | 69 | 6.23 | 15.3 | 600 | 290 | 8.11 | Ø |
| MW-4S | 10/19/09 | 3:25 | 9:01 | I VOCs & Metals | 8 | P&DB | N | | 22.1 | NR | 2.7 | 63 | 6.09 | 15.2 | 90 | 40 | 13.2 | Ø |
| MW-4D | 10/19/09 | 2:40 | 8:51 | I VOCs & Metals | 21 | P&DB | N | | 43.1 | NR | 2.5 | -10 | 6.36 | 15.1 | 100 | 40 | 9.81 | Ø |
| MW-5 | 10/19/09 | 5:05 | 43.95 | I VOCs & Metals | 4 | P&DB | N | Datum needs survey | 48.5 | NR | 2.7 | 38 | 6.52 | 15.4 | 110 | 50 | 4.32 | Ø |
| MW-6R | 10/19/09 | 5:40 | 67.34 | I VOCs & Metals | 9 | P&NB | N | | 81.3 | NR | 2.3 | 163 | 6.21 | 15.1 | 130 | 60 | 16.2 | Ø |
| SWN-1 | 10/19/09 | 1:40 | - | I VOCs & Metals | - | Dip | - | | - | NR | 7.3 | 38 | 7.01 | 10.2 | 80 | 30 | 3.12 | - |
| SWN-2 | 10/19/09 | 3:40 | - | I VOCs & Metals | - | Dip | - | | - | NR | 8.0 | 18 | 6.98 | 9.9 | 70 | 30 | 4.03 | - |
| SWN-3 | NS | NS DRY | - | I VOCs & Metals | - | — | - | - | - | — | — | — | — | — | — | — | — | - |
| LAGOON | 10/19/09 | 5:55 | - | Leachate List | - | - | - | - | - | NR | NR | NR | 6.72 | NR | out of Range | ST | - | - |
| MLW-A | - | - | 32.03 | WLR only | - | - | - | - | 93.5 | - | - | - | - | - | - | - | Ø | - |
| P2-6S | NS | | | | | | | | | | | | | | | | 58.15 | |
| P2-6D | NS | | | | | | | | | | | | | | | | 61.08 | |
| P2-11S | NS | | | | | | | | | | | | | | | | 50.34 | |
| P2-11D | NS | | | | | | | | | | | | | | | | 49.99 | |
| P2-12 | NS | | | | | | | | | | | | | | | | 53.85 | |

Comments

SS B=Stainless Steel Baler, D B=Disposable Baler, P=Low flow Pump, PD=Purged Dry

VT=Very Turbid, MT=Moderately Turbid, ST=Slightly Turbid, C=Clear

NR=No Reading Attempted, NS=No Sample Obtained

*= Caution w/ DO as potentially insufficient flowrate w/ Baler method.

Appendix A

Statistical Analysis

Statistical Analysis Methodology

Statistical Analysis Methodologies

A statistical analysis was performed on metal and VOC detections utilizing Chemstat software, which was developed specifically for RCRA Subtitle D sites and conforms to both current EPA and SWS protocols. A step-wise approach was utilized to evaluate trends in groundwater quality to identify a potential release from the landfill. Analytical data underwent preliminary data evaluation to reduce the data set and to determine if any “outliers” (defined as data that appears to be incongruent with respect to historical results) or seasonality exists that may potentially effect the results of the subsequent statistical analysis. All statistical tests were evaluated at the 0.05 level of significance, 95% confidence level, and were conducted as one-tailed tests. Statistical background values were calculated using un-manipulated data from historical semi-annual sampling events for this facility from 1998 to the current event. Historical data compiled for monitoring well(s) were used as the baseline. Groundwater data from the downgradient well(s) were compared to the pooled background groundwater data (inter-well) using methods which varied depending upon the percentage of non-detects. If necessary and applicable further intra-well analysis was conducted to compare current data from a single well is compared to its own respective historical data. Finally parameters that indicated statistical significance after previous tests are evaluated to estimate the change in concentration over time to determine if there is an upward trend.

Preliminary Data Evaluation

A preliminary data screening was conducted upon detections. Parameters detected with concentrations found below quantifiable levels (SWSL) and below those detected within the background well were eliminated and a statistical analysis was not conducted for that particular constituent/well.

Data distributions were reviewed using box and whiskers plots (enclosed charts). In order to evaluate variability in concentrations with respect to time and season, time series plots were generated for select constituents (enclosed charts). Time series plots were also visually evaluated for seasonality and “outliers”. Suspected outliers were then further evaluated through Dixon's Test for Outliers or Rosner's Test for Outliers depending upon the number of samples and the data distribution. Outliers are generally not censored from the current nor historical data set prior to statistical analysis but are further evaluated and or qualified as necessary.

Inter-well Analyses

Inter-well statistical analysis was conducted upon total metals detected during this sampling event. Monitoring well MW-1 was defined as the background well, and an upper tolerance limit (UTL) with 95% coverage was computed for each detected constituent from the background data at a 95% level of confidence. For each tested constituent, an appropriate statistical analysis method was selected based on the percentages of non-detects (%ND) in the historical background data. The following Table 1 summarizes the methods used for four different %ND ranges.

Table 1. Statistical Analysis Methods for Various %ND Ranges

| %ND | Analysis Method | ND Substitution |
|-------------|--------------------------------|-----------------|
| %ND<15% | Parametric tolerance limit | 1/2 ND |
| 15%<%ND<50% | Parametric tolerance limit | Cohen or 1/2 ND |
| 50%<%ND<90% | Non-parametric tolerance limit | 1/2 ND |
| 90%<%ND | Poisson tolerance limit | - |

NOTE: For parametric tolerance interval, normality of the background data was checked by the Shapiro-Wilks normality test, as the method requires that the data be normally distributed.

Intra-well Analysis

Intra-well analysis was conducted only upon those constituents that were found to be statistically significant by inter-well analysis and there is sufficient historical samples known to not be impacted. With intra-well comparisons, data from a single well is compared to historical data from the same well. In general, intra-well analysis is typically used to differentiate true contamination from spatial variability. Intra-well analysis is generally conducted through interpretation of Shewhart-CUSUM and/or Exponentially Weighted Moving Average (EWMA) control charts where applicable.

Poisson Prediction Interval (VOCs)

All historical VOC detections in the background well MW-1 were pooled in order to determine the total number of detections, from which the expected number of detections in a single downgradient monitoring point (y^*) was derived by utilizing the Poisson prediction interval (Table A2) The parameter y^* is defined by the following equation:

$$y^* = cy + \frac{t^2 c}{2} + tc \sqrt{y \left(1 + \frac{1}{c} \right) + \frac{t^2}{4}}$$

where

$c = 1/n$ (n = number of background samples)

t = one-sided value of student's t -Statistic at 95% confidence ^a

y = number of events observed in n previous samples

y^* = expected number of events in a single future sample

^a Gibbons, R.D., 1994, Statistical methods for groundwater monitoring: John Wiley & Sons, Inc., p.12.

For each monitoring location showing any VOC detections, the number of detected VOCs was counted with each detection being considered a “hit”. The number was then compared with the expected number of detections derived from the background VOC data (Table A3). The value of Student's t -Statistic was derived from tabulated values included in Gibbons (1994).

Determine Data Trend Over Time

The parameters that indicated statistical significance a further qualitative evaluation is employed to determine trends in concentration over time. Implementation of Mann-Kendall Trend Analysis or Sen's Slope Analysis is generally used to determine if the concentration trend is increasing, decreasing, or remaining constant.

Statistical Analysis Summary Tables & Graphs

Inter-Well Analyses Summary (Groundwater)
Surry County Subtitle D Lined Landfill

Background Well: (MW-1)

Cadmium, total

| %ND | Normality | Method | ND Adj. | Upper Limit ($\alpha = 95\%$) | Unit |
|-------|-----------|--------------------------------|---------|------------------------------------|------|
| 81.48 | - | Non-parametric tolerance limit | 1/2 ND | 15.7 | ug/l |

| Well | Result | Significance |
|--------------|--------|--------------|
| MW-4D | 1.9 | no |

NOTE: Bold-faced monitoring points indicate detected levels exceed 2L Standard

Inter-Well Analyses Summary (Surfacewater)
Surry County Subtitle D Lined Landfill

Background Surface Water: (SWN-1)

Silver, total

| %ND | Normality | Method | ND Adj. | Upper Limit ($\alpha = 95\%$) | Unit |
|-------|-----------|-------------------------|---------|------------------------------------|------|
| 90.90 | - | Poisson Tolerance Limit | ND | 15.0 | ug/l |

| Well | Result | Significance |
|--------------|--------|--------------|
| SWN-2 | 0.28 | no |

NOTE: Bold-faced monitoring points indicate detected levels exceed 2B Standard

Summary of Pooled VOCs in Background Wells (MW-1)

Surry County Subtitle D Lined Landfill

| Constituent | Samples | NDs | % NDs |
|-----------------------------|-------------|-------------|---------------|
| 1,1,1,2-Tetrachloroethane | 27 | 27 | 100.00 |
| 1,1,1-Trichloroethane | 27 | 27 | 100.00 |
| 1,1,2,2-Tetrachloroethane | 27 | 27 | 100.00 |
| 1,1,2-Trichloroethane | 27 | 27 | 100.00 |
| 1,1-Dichloroethane | 27 | 27 | 100.00 |
| 1,1-Dichloroethene | 27 | 27 | 100.00 |
| 1,2,3-Trichloropropane | 27 | 27 | 100.00 |
| 1,2-Dibromo-3-chloropropane | 27 | 27 | 100.00 |
| 1,2-Dibromoethane | 27 | 27 | 100.00 |
| 1,2-Dichlorobenzene | 27 | 27 | 100.00 |
| 1,2-Dichloroethane | 27 | 27 | 100.00 |
| 1,2-Dichloropropane | 27 | 27 | 100.00 |
| 1,4-Dichlorobenzene | 27 | 27 | 100.00 |
| 2-Butanone | 27 | 27 | 100.00 |
| 2-Hexanone | 27 | 27 | 100.00 |
| 4-Methyl-2-Pentanone | 27 | 27 | 100.00 |
| Acetone | 27 | 27 | 100.00 |
| Acrylonitrile | 27 | 27 | 100.00 |
| Benzene | 27 | 27 | 100.00 |
| Bromochloromethane | 27 | 27 | 100.00 |
| Bromodichloromethane | 27 | 27 | 100.00 |
| Bromoform | 27 | 27 | 100.00 |
| Bromomethane | 27 | 27 | 100.00 |
| Carbon disulfide | 27 | 27 | 100.00 |
| Carbon tetrachloride | 27 | 27 | 100.00 |
| Chlorobenzene | 27 | 27 | 100.00 |
| Chlorodibromomethane | 27 | 27 | 100.00 |
| Chloroethane | 27 | 27 | 100.00 |
| Chloroform | 27 | 27 | 100.00 |
| Chloromethane | 27 | 27 | 100.00 |
| cis-1,2-Dichloroethene | 27 | 27 | 100.00 |
| cis-1,3-Dichloropropene | 27 | 27 | 100.00 |
| Dibromomethane | 27 | 27 | 100.00 |
| Dichloromethane | 27 | 27 | 100.00 |
| Ethylbenzene | 27 | 27 | 100.00 |
| Iodomethane | 27 | 27 | 100.00 |
| Styrene | 27 | 27 | 100.00 |
| Tetrachloroethylene | 27 | 27 | 100.00 |
| Toluene | 27 | 27 | 100.00 |
| trans-1,2-Dichloroethene | 27 | 27 | 100.00 |
| trans-1,3-Dichloropropene | 27 | 27 | 100.00 |
| trans-1,4-Dichloro-2-butene | 27 | 27 | 100.00 |
| Trichloroethylene | 27 | 27 | 100.00 |
| Trichlorofluoromethane | 27 | 27 | 100.00 |
| Vinyl acetate | 27 | 27 | 100.00 |
| Vinyl chloride | 27 | 27 | 100.00 |
| Xylene | 27 | 27 | 100.00 |
| Total | 1269 | 1269 | 100.00 |

Poisson Prediction Interval Based upon Pooled Background VOCs
Surry County Subtitle D Lined Landfill

All detected VOCs (Background Well: MW-1)

| | |
|------------------------------|-------------|
| Constituent | None |
| None | |
| Detection(s) per Scan | 0.00 |

"j" qualifiers omitted for statistical analysis purposes

Total number of sampling events [n] = 27

Total number of detections in background wells [y] = 0

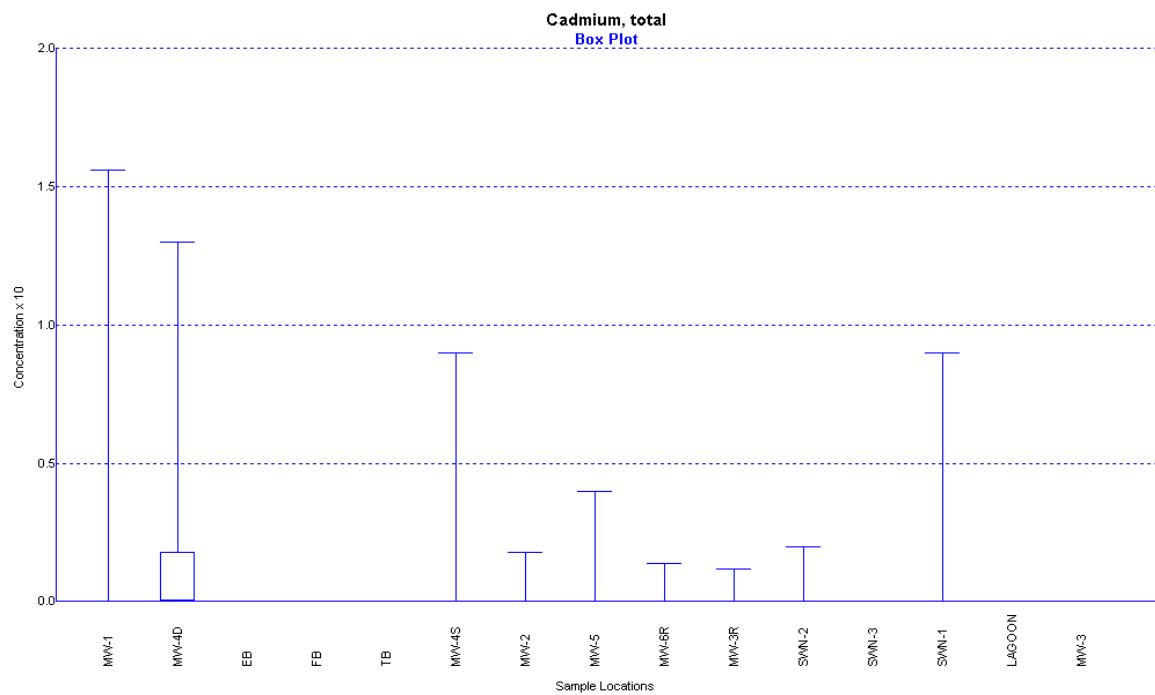
Number of comparisons (downgradient wells) [k] = 6

One-sided value of Student's t-statistic (95% confidence) [t] = 2.54

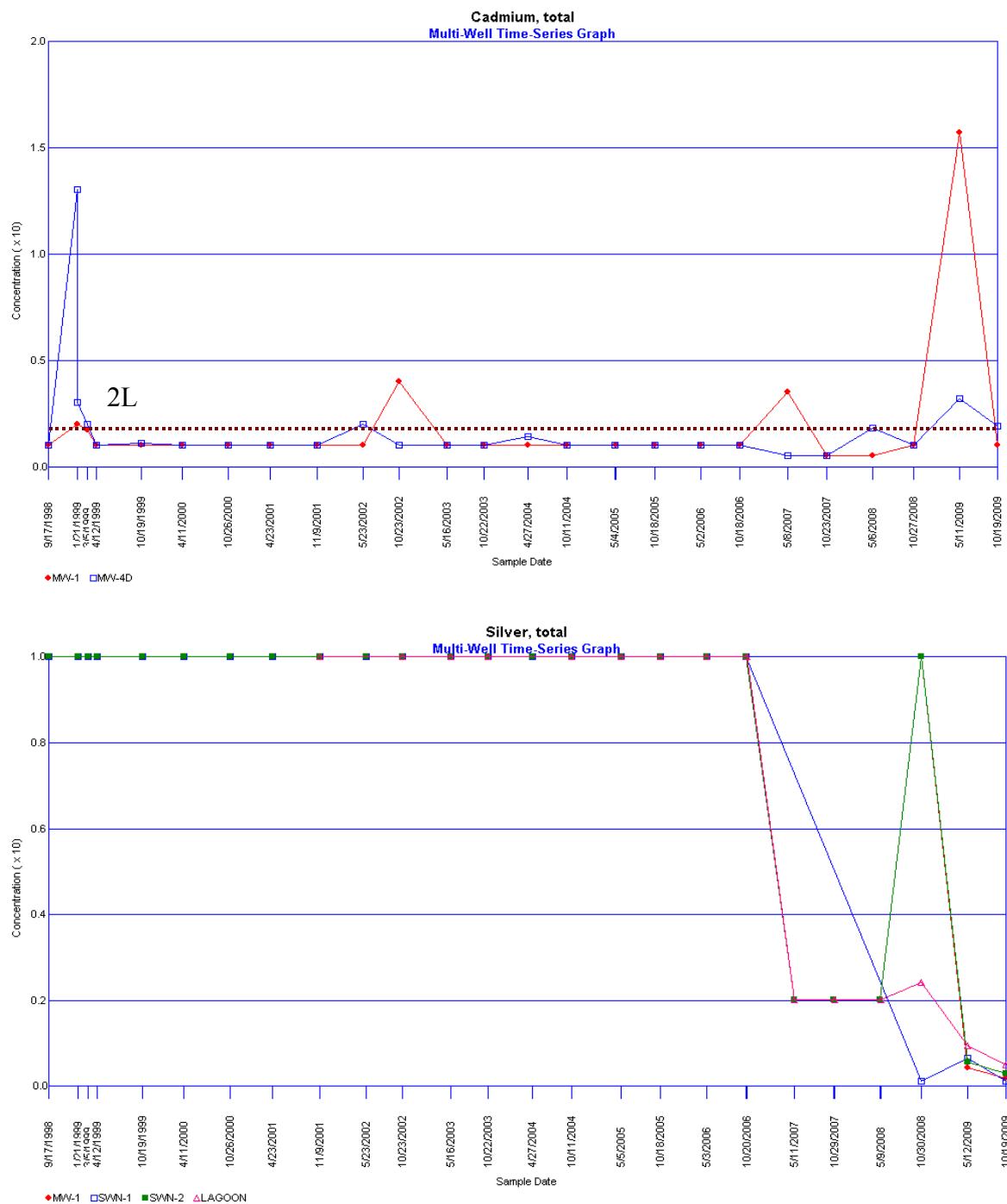
Expected number of detections in a single future sample [y*] = **0.24**

**No Statistically Significant VOC detections found
at a 95% confidence Level.**

Box Plots for Select Constituents
Surry County Subtitle D Lined Landfill



Time Series Plots for Select Constituents
Surry County Subtitle D Lined Landfill



ND = DL

Statistical Analysis

Basic Statistics

Basic Statistics

Parameter: Cadmium, total

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

| Total Observations | |
|--------------------|----------|
| 241 | |
| Total Non-Detects | 207 |
| Pooled Mean | 0.746888 |
| Pooled Std Dev | 1.21673 |
| Background Mean | 0.834615 |
| Background Std Dev | 0.941357 |

Background Wells

There is 1 background well

| Well | | Non-Detects | % ND | Total | |
|------|----------|-------------|---------|----------|-----------|
| MW-1 | | 26 | 22 | 84.6154 | 21.7 |
| Well | Mean | Std Dev | Std Err | Rank Sum | Rank Mean |
| MW-1 | 0.834615 | 0.941357 | 0 | 3215 | 123.654 |

Compliance Wells

There are 11 compliance wells

| Well | | Non-Detects | % ND | Total | | |
|--------|----------|-------------|--------------|----------|----------|-----------|
| MW-4S | | 24 | 20 | 83.3333 | 22.1 | |
| MW-2 | | 26 | 22 | 84.6154 | 14.8 | |
| MW-5 | | 27 | 22 | 81.4815 | 19.55 | |
| MW-6R | | 22 | 19 | 86.3636 | 12.2 | |
| MW-3R | | 11 | 10 | 90.9091 | 5.1 | |
| MW-4D | | 25 | 17 | 68 | 34.2 | |
| SWN-2 | | 24 | 23 | 95.8333 | 12.75 | |
| SWN-3 | | 7 | 7 | 100 | 3.25 | |
| SWN-1 | | 21 | 17 | 80.9524 | 21.1 | |
| LAGOON | | 14 | 14 | 100 | 6.25 | |
| MW-3 | | 14 | 14 | 100 | 7 | |
| Well | Mean | Std Dev | Dif From Bkg | Std Err | Rank Sum | Rank Mean |
| MW-4S | 0.920833 | 1.75833 | 0.0862179 | 0.343399 | 2972 | 123.833 |
| MW-2 | 0.569231 | 0.320336 | -0.265385 | 0.336461 | 3144 | 120.923 |
| MW-5 | 0.724074 | 0.745031 | -0.110541 | 0.333331 | 3405 | 126.111 |
| MW-6R | 0.554545 | 0.302729 | -0.28007 | 0.351422 | 2633 | 119.682 |
| MW-3R | 0.463636 | 0.244019 | -0.370979 | 0.436339 | 1257 | 114.273 |
| MW-4D | 1.368 | 2.52578 | 0.533385 | 0.339809 | 3604 | 144.16 |
| SWN-2 | 0.53125 | 0.323974 | -0.303365 | 0.343399 | 2626 | 109.417 |
| SWN-3 | 0.464286 | 0.0944911 | -0.37033 | 0.516568 | 728 | 104 |
| SWN-1 | 1.00476 | 1.8508 | 0.170147 | 0.355926 | 2665 | 126.905 |
| LAGOON | 0.446429 | 0.106454 | -0.388187 | 0.402148 | 1456 | 104 |
| MW-3 | 0.5 | 0 | -0.334615 | 0.402148 | 1456 | 104 |

Analysis of Variance Statistics

| | |
|----------|---------|
| SS Wells | 18.2906 |
| SS Total | 355.305 |

Kruskal-Wallis Statistics

| | |
|----------------------|---------|
| Non-Detect Rank | 104 |
| Background Rank Sum | 3215 |
| Background Rank Mean | 123.654 |
| H Statistic | 5.98628 |
| H Adjusted for Ties | 16.3408 |

Poisson Tolerance Limit

Parameter: Silver, total

Original Data (Not Transformed)

Non-Detects Replaced with Detection Limit

Poisson Count of 22 background Samples = 190.84

Degrees of Freedom = 383

95% Confidence Values

Chi-Squared Value (95% Confidence) = 429.633

Lambda (from Zack's formula) = 9.76438

Smallest Degrees of Freedom = 32

Upper Tolerance Limit (95%) = 15

99% Confidence Values

Chi-Squared Value (99% Confidence) = 450.311

Lambda (from Zack's formula) = 10.2343

Smallest Degrees of Freedom = 38

Upper Tolerance Limit (99%) = 18

| | Date | Result | Impacted 95% | Impacted 99% |
|-------|------------|--------|--------------|--------------|
| SWN-2 | 9/17/1998 | ND<10 | FALSE | FALSE |
| | 1/21/1999 | ND<10 | FALSE | FALSE |
| | 3/5/1999 | ND<10 | FALSE | FALSE |
| | 4/12/1999 | ND<10 | FALSE | FALSE |
| | 10/19/1999 | ND<10 | FALSE | FALSE |
| | 4/11/2000 | ND<10 | FALSE | FALSE |
| | 10/26/2000 | ND<10 | FALSE | FALSE |
| | 4/23/2001 | ND<10 | FALSE | FALSE |
| | 11/9/2001 | ND<10 | FALSE | FALSE |
| | 5/23/2002 | ND<10 | FALSE | FALSE |
| | 10/23/2002 | ND<10 | FALSE | FALSE |
| | 5/16/2003 | ND<10 | FALSE | FALSE |
| | 10/22/2003 | ND<10 | FALSE | FALSE |
| | 4/27/2004 | ND<10 | FALSE | FALSE |
| | 10/11/2004 | ND<10 | FALSE | FALSE |
| | 5/5/2005 | ND<10 | FALSE | FALSE |
| | 10/18/2005 | ND<10 | FALSE | FALSE |
| | 5/2/2006 | ND<10 | FALSE | FALSE |
| | 10/18/2006 | ND<10 | FALSE | FALSE |
| | 5/8/2007 | ND<2 | FALSE | FALSE |
| | 10/23/2007 | ND<2 | FALSE | FALSE |
| | 5/6/2008 | ND<2 | FALSE | FALSE |
| | 10/28/2008 | ND<10 | FALSE | FALSE |
| | 5/11/2009 | 0.55 | FALSE | FALSE |
| | 10/19/2009 | 0.28 | FALSE | FALSE |

Statistical Analysis

Inter-well Analysis

Non-Parametric Tolerance Interval

Parameter: Cadmium, total

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Percent Non-Detects = 73.5849%

Background Samples (n) = 27

Maximum Background Concentration = 15.7

Minimum Coverage = 89.5%

Average Coverage = 96.4286%

| Well | Sample | Result | Impacted |
|-------|------------|---------|----------|
| MW-4D | 9/17/1998 | ND<0.5 | FALSE |
| MW-4D | 1/21/1999 | 13 | FALSE |
| MW-4D | 1/21/1999 | 3 | FALSE |
| MW-4D | 3/5/1999 | 2 | FALSE |
| MW-4D | 4/12/1999 | ND<0.5 | FALSE |
| MW-4D | 10/19/1999 | 1.1 | FALSE |
| MW-4D | 4/11/2000 | ND<0.5 | FALSE |
| MW-4D | 10/26/2000 | ND<0.5 | FALSE |
| MW-4D | 4/23/2001 | ND<0.5 | FALSE |
| MW-4D | 11/9/2001 | ND<0.5 | FALSE |
| MW-4D | 5/23/2002 | 2 | FALSE |
| MW-4D | 10/23/2002 | ND<0.5 | FALSE |
| MW-4D | 5/16/2003 | ND<0.5 | FALSE |
| MW-4D | 10/22/2003 | ND<0.5 | FALSE |
| MW-4D | 4/27/2004 | 1.4 | FALSE |
| MW-4D | 10/11/2004 | ND<0.5 | FALSE |
| MW-4D | 5/4/2005 | ND<0.5 | FALSE |
| MW-4D | 10/18/2005 | ND<0.5 | FALSE |
| MW-4D | 5/2/2006 | ND<0.5 | FALSE |
| MW-4D | 10/18/2006 | ND<0.5 | FALSE |
| MW-4D | 5/8/2007 | ND<0.25 | FALSE |
| MW-4D | 10/23/2007 | ND<0.25 | FALSE |
| MW-4D | 5/6/2008 | 1.8 | FALSE |
| MW-4D | 10/27/2008 | ND<0.5 | FALSE |
| MW-4D | 5/11/2009 | 3.2 | FALSE |
| MW-4D | 10/19/2009 | 1.9 | FALSE |

Basic Statistics

Parameter: Silver, total

Original Data (Not Transformed)

Non-Detects Replaced with Detection Limit

Total Observations

| | |
|--------------------|---------|
| 47 | |
| Total Non-Detects | 43 |
| Pooled Mean | 8.46106 |
| Pooled Std Dev | 3.45181 |
| Background Mean | 8.67455 |
| Background Std Dev | 3.41543 |

Background Wells

There is 1 background well

| Well | | Non-Detects | % ND | Total | |
|-------|---------|-------------|---------|----------|-----------|
| SWN-1 | | 22 | 20 | 90.9091 | |
| Well | Mean | Std Dev | Std Err | Rank Sum | Rank Mean |
| SWN-1 | 8.67455 | 3.41543 | 0 | 531 | 24.1364 |

Compliance Wells

There is 1 compliance well

| Well | | Non-Detects | % ND | Total | | |
|-------|--------|-------------|--------------|---------|----------|-----------|
| SWN-2 | | 25 | 23 | 92 | | 206.83 |
| Well | Mean | Std Dev | Dif From Bkg | Std Err | Rank Sum | Rank Mean |
| SWN-2 | 8.2732 | 3.5428 | -0.401345 | 1.01845 | 597 | 23.88 |

Analysis of Variance Statistics

| | |
|----------|---------|
| SS Wells | 1.88496 |
| SS Total | 548.089 |

Kruskal-Wallis Statistics

| | |
|----------------------|------------|
| Non-Detect Rank | 22 |
| Background Rank Sum | 531 |
| Background Rank Mean | 24.1364 |
| H Statistic | 0.00409091 |
| H Adjusted for Ties | 0.0174621 |

Appendix B

Laboratory Analysis Report &

Chains of Custody

CHAIN-OF-CUSTODY / Analytical Request Document

This Statement of Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

| Section A Required Client Information: | | Section B Required Project Information: | | Section C Invoice Information: | |
|--|--|--|--|--|---------------------|
| Company: Global Engineering Services (Mexico) Address: P.O. Box 972 | | Report To: John Paul Copy To: See Section A | | Attention: See Section A Company Name: REGULATORY AGENCY | |
| Email To: GlobalEngServices.co.com | | Purchase Order No.: | | Address: | |
| Phone: (919) 772-3333 | | Project Name: Utility Line and Sewer | | Pace Quote Reference: Pace Project Manager: Pace Profile #: 203-3 | |
| Requested Due Date/TAT: Standard | | Project Number: 1322231 | | Site Location NC | STATE: NC |

ORIGINAL

| | |
|-----------------------------------|------------------------------|
| SAMPLER NAME AND SIGNATURE | |
| PRINT Name of SAMPLER: | |
| SIGNATURE of SAMPLER: | DATE Signed (MM/DD/YYYY): |
| Temp in °C | |
| Received on Ice (Y/N) | |
| Custody Sealed Cooler (Y/N) | |
| Samples Intact (Y/N) | |



Sample Condition Upon Receipt

Client Name: Municipal Project # 9255627Courier: FedEx UPS USPS Client Commercial Pace Other _____Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

| | |
|-----------------|-----|
| Optional | |
| Proj. Due Date: | N/A |
| Proj. Name: | N/A |

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used T060

Type of Ice: Wet Blue None Samples on ice, cooling process has begunCooler Temperature 3.0

Temp should be above freezing to 6°C

Biological Tissue is Frozen: Yes No N/ADate and Initials of person examining contents: JEA/10/26/09

Comments:

| | | |
|--|---|--|
| Chain of Custody Present: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 1. |
| Chain of Custody Filled Out: | <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | 2. Received sulfide for IT#10 on coo |
| Chain of Custody Relinquished: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 3. NOT marked for Analysis |
| Sampler Name & Signature on COC: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 4. |
| Samples Arrived within Hold Time: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 5. |
| Short Hold Time Analysis (<72hr): | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 6. |
| Rush Turn Around Time Requested: | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | 7. |
| Sufficient Volume: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 8. |
| Correct Containers Used: | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | 9. on coo - IT#10 Received BOD in Amber glass bt |
| -Pace Containers Used: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Did not receive nitrate |
| Containers Intact: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 10. |
| Filtered volume received for Dissolved tests | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | 11. |
| Sample Labels match COC: | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | 12. Received metals bottle not on coo |
| -Includes date/time/ID/Analysis Matrix: | <u>WT</u> | No time or Date or ID |
| All containers needing preservation have been checked. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 13. looks like "Chimney SW" written on side of bottle. |
| All containers needing preservation are found to be in compliance with EPA recommendation. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) | <input type="checkbox"/> Yes <input type="checkbox"/> No | Initial when completed |
| Samples checked for dechlorination: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 14. |
| Headspace in VOA Vials (>6mm): | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | 15. |
| Trip Blank Present: | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | 16. |
| Trip Blank Custody Seals Present | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | |
| Pace Trip Blank Lot # (if purchased): | N/A | |

Client Notification/ Resolution:

Field Data Required? Y / N / N/A

Person Contacted: Jonathan Pfohl Date/Time: 10/20/09Comments/ Resolution: Don't run Sulfide, run Sulfate

Project Manager Review:

BKMDate: 10/20/09

November 24, 2009

Mr. Jonathan Pfohl
Municipal Engineering Services
PO Box 97
Garner, NC 27529

RE: Project: SURRY LINED MSW LF
Pace Project No.: 9255627

Dear Mr. Pfohl:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Bonnie McKee

bonnie.mckee@pacelabs.com
Project Manager

Enclosures

cc: Ms. Maggie German, Municipal Engineering Services

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

Charlotte Certification IDs

9800 Kincey Ave. - Ste 100 Huntersville, NC 28078
West Virginia Certification #: 357
Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706

North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784
South Carolina Certification #: 990060001
South Carolina Drinking Water Cert. #: 990060003
Tennessee Certification #: 04010
Virginia Certification #: 00213

Asheville Certification IDs

2225 Riverside Dr. Asheville, NC 28804
Connecticut Certification #: PH-0106
Louisiana/LELAP Certification #: 03095
Massachusetts Certification #: M-NC030
New Jersey Certification #: NC011
North Carolina Bioassay Certification #: 9
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40

Pennsylvania Certification #: 68-03578
South Carolina Bioassay Certification #: 99030002
South Carolina Certification #: 99030001
Tennessee Certification #: 2980
Virginia Certification #: 00072
West Virginia Certification #: 356
Florida/NELAP Certification #: E87648

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SAMPLE SUMMARY

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|------------|-----------|--------|----------------|----------------|
| 9255627001 | MW-1 | Water | 10/19/09 16:30 | 10/20/09 11:20 |
| 9255627002 | MW-2 | Water | 10/19/09 16:00 | 10/20/09 11:20 |
| 9255627003 | MW-3R | Water | 10/19/09 14:00 | 10/20/09 11:20 |
| 9255627004 | MW-4S | Water | 10/19/09 15:25 | 10/20/09 11:20 |
| 9255627005 | MW-4D | Water | 10/19/09 14:40 | 10/20/09 11:20 |
| 9255627006 | MW-5 | Water | 10/19/09 17:05 | 10/20/09 11:20 |
| 9255627007 | MW-6R | Water | 10/19/09 17:40 | 10/20/09 11:20 |
| 9255627008 | SWN-1 | Water | 10/19/09 13:40 | 10/20/09 11:20 |
| 9255627009 | SWN-2 | Water | 10/19/09 15:40 | 10/20/09 11:20 |
| 9255627010 | LAGOON | Water | 10/19/09 17:55 | 10/20/09 11:20 |

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SAMPLE ANALYTE COUNT

Project: SURRY LINED MSW LF
Pace Project No.: 9255627

| Lab ID | Sample ID | Method | Analysts | Analytes Reported | Laboratory |
|------------|---------------|--------------|----------|-------------------|------------|
| 9255627001 | MW-1 | EPA 6010 | JMW | 15 | PASI-A |
| | | EPA 8260 | MCK | 54 | PASI-C |
| 9255627002 | MW-2 | EPA 6010 | JMW | 15 | PASI-A |
| | | EPA 8260 | MCK | 54 | PASI-C |
| 9255627003 | MW-3R | EPA 6010 | JMW | 15 | PASI-A |
| | | EPA 8260 | MCK | 54 | PASI-C |
| 9255627004 | MW-4S | EPA 6010 | JMW | 15 | PASI-A |
| | | EPA 8260 | MCK | 54 | PASI-C |
| 9255627005 | MW-4D | EPA 6010 | JMW | 15 | PASI-A |
| | | EPA 8260 | MCK | 54 | PASI-C |
| 9255627006 | MW-5 | EPA 6010 | JMW | 15 | PASI-A |
| | | EPA 8260 | MCK | 54 | PASI-C |
| 9255627007 | MW-6R | EPA 6010 | JMW | 15 | PASI-A |
| | | EPA 8260 | MCK | 54 | PASI-C |
| 9255627008 | SWN-1 | EPA 6010 | JMW | 15 | PASI-A |
| | | EPA 8260 | MCK | 54 | PASI-C |
| 9255627009 | SWN-2 | EPA 6010 | JMW | 15 | PASI-A |
| | | EPA 8260 | MCK | 54 | PASI-C |
| 9255627010 | LAGOON | ASTM D516-90 | TEE | 1 | PASI-A |
| | | EPA 353.2 | RAB | 1 | PASI-A |
| | | EPA 365.1 | LEP | 1 | PASI-A |
| | | EPA 6010 | JMW | 15 | PASI-A |
| | | EPA 8260 | MCK | 54 | PASI-C |
| | | SM 5210B | LEP | 1 | PASI-A |
| | | SM 5220D | JDA | 1 | PASI-A |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-1 | Lab ID: 9255627001 | Collected: 10/19/09 16:30 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|--|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 ICP Groundwater | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Antimony | ND ug/L | | 6.0 | 2.6 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-36-0 | |
| Arsenic | 3.5J ug/L | | 10.0 | 2.7 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-38-2 | |
| Barium | 184 ug/L | | 100 | 0.20 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-39-3 | |
| Beryllium | 3.1 ug/L | | 1.0 | 0.10 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-41-7 | |
| Cadmium | ND ug/L | | 1.0 | 0.50 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-43-9 | |
| Chromium | 42.2 ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-47-3 | |
| Cobalt | 16.7 ug/L | | 10.0 | 0.60 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-48-4 | |
| Copper | 95.8 ug/L | | 10.0 | 0.30 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-50-8 | |
| Lead | 18.6 ug/L | | 10.0 | 4.0 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7439-92-1 | |
| Nickel | 29.0J ug/L | | 50.0 | 1.7 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-02-0 | |
| Selenium | ND ug/L | | 10.0 | 3.8 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7782-49-2 | |
| Silver | 0.17J ug/L | | 10.0 | 0.10 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-22-4 | |
| Thallium | ND ug/L | | 5.5 | 3.0 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-28-0 | |
| Vanadium | 34.0 ug/L | | 25.0 | 0.20 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-62-2 | |
| Zinc | 135 ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/24/09 00:09 | 7440-66-6 | Z2 |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND ug/L | | 100 | 2.2 | 1 | | 10/30/09 00:53 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 10/30/09 00:53 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 00:53 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 10/30/09 00:53 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 10/30/09 00:53 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 10/30/09 00:53 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 10/30/09 00:53 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 10/30/09 00:53 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 10/30/09 00:53 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 00:53 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 10/30/09 00:53 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 10/30/09 00:53 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 10/30/09 00:53 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 10/30/09 00:53 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 10/30/09 00:53 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 10/30/09 00:53 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 00:53 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 10/30/09 00:53 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 10/30/09 00:53 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 10/30/09 00:53 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 10/30/09 00:53 | 110-57-6 | |
| 1,1-Dichloroethane | ND ug/L | | 5.0 | 0.32 | 1 | | 10/30/09 00:53 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 10/30/09 00:53 | 107-06-2 | |
| 1,1-Dichloroethene | ND ug/L | | 5.0 | 0.56 | 1 | | 10/30/09 00:53 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND ug/L | | 5.0 | 0.19 | 1 | | 10/30/09 00:53 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND ug/L | | 5.0 | 0.49 | 1 | | 10/30/09 00:53 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 00:53 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 10/30/09 00:53 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 10/30/09 00:53 | 10061-01-5 | |

Date: 11/24/2009 05:01 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-1 | Lab ID: 9255627001 | Collected: 10/19/09 16:30 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 00:53 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 10/30/09 00:53 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 10/30/09 00:53 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 10/30/09 00:53 | 74-88-4 | |
| Methylene Chloride | ND ug/L | | 2.0 | 0.97 | 1 | | 10/30/09 00:53 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 10/30/09 00:53 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 00:53 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 10/30/09 00:53 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 10/30/09 00:53 | 79-34-5 | |
| Tetrachloroethene | ND ug/L | | 1.0 | 0.46 | 1 | | 10/30/09 00:53 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 00:53 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 10/30/09 00:53 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 10/30/09 00:53 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 10/30/09 00:53 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 10/30/09 00:53 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 10/30/09 00:53 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 10/30/09 00:53 | 108-05-4 | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 10/30/09 00:53 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 5.0 | 0.66 | 1 | | 10/30/09 00:53 | 1330-20-7 | |
| m&p-Xylene | ND ug/L | | 2.0 | 0.66 | 1 | | 10/30/09 00:53 | 1330-20-7 | |
| o-Xylene | ND ug/L | | 1.0 | 0.23 | 1 | | 10/30/09 00:53 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 100 % | | 87-109 | | 1 | | 10/30/09 00:53 | 460-00-4 | |
| Dibromofluoromethane (S) | 98 % | | 85-115 | | 1 | | 10/30/09 00:53 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 100 % | | 79-120 | | 1 | | 10/30/09 00:53 | 17060-07-0 | |
| Toluene-d8 (S) | 88 % | | 70-120 | | 1 | | 10/30/09 00:53 | 2037-26-5 | |

ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-2 | Lab ID: 9255627002 | Collected: 10/19/09 16:00 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|--|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 ICP Groundwater | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Antimony | ND ug/L | | 6.0 | 2.6 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-36-0 | |
| Arsenic | ND ug/L | | 10.0 | 2.7 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-38-2 | |
| Barium | 43.1J ug/L | | 100 | 0.20 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-39-3 | |
| Beryllium | 0.20J ug/L | | 1.0 | 0.10 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-41-7 | |
| Cadmium | 0.86J ug/L | | 1.0 | 0.50 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-43-9 | |
| Chromium | 2.2J ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-47-3 | |
| Cobalt | ND ug/L | | 10.0 | 0.60 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-48-4 | |
| Copper | 0.97J ug/L | | 10.0 | 0.30 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-50-8 | |
| Lead | ND ug/L | | 10.0 | 4.0 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7439-92-1 | |
| Nickel | ND ug/L | | 50.0 | 1.7 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-02-0 | |
| Selenium | ND ug/L | | 10.0 | 3.8 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7782-49-2 | |
| Silver | ND ug/L | | 10.0 | 0.10 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-22-4 | |
| Thallium | ND ug/L | | 5.5 | 3.0 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-28-0 | |
| Vanadium | 4.4J ug/L | | 25.0 | 0.20 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-62-2 | |
| Zinc | 14.3 ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/24/09 00:14 | 7440-66-6 | Z2 |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | 17.0J ug/L | | 100 | 2.2 | 1 | | 10/30/09 01:11 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 10/30/09 01:11 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 01:11 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 10/30/09 01:11 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 10/30/09 01:11 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 10/30/09 01:11 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 10/30/09 01:11 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 10/30/09 01:11 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 10/30/09 01:11 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 01:11 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 10/30/09 01:11 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 10/30/09 01:11 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 10/30/09 01:11 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 10/30/09 01:11 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 10/30/09 01:11 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 10/30/09 01:11 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 01:11 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 10/30/09 01:11 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 10/30/09 01:11 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 10/30/09 01:11 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 10/30/09 01:11 | 110-57-6 | |
| 1,1-Dichloroethane | 2.4J ug/L | | 5.0 | 0.32 | 1 | | 10/30/09 01:11 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 10/30/09 01:11 | 107-06-2 | |
| 1,1-Dichloroethene | ND ug/L | | 5.0 | 0.56 | 1 | | 10/30/09 01:11 | 75-35-4 | |
| cis-1,2-Dichloroethene | 0.82J ug/L | | 5.0 | 0.19 | 1 | | 10/30/09 01:11 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND ug/L | | 5.0 | 0.49 | 1 | | 10/30/09 01:11 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 01:11 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 10/30/09 01:11 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 10/30/09 01:11 | 10061-01-5 | |

Date: 11/24/2009 05:01 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-2 | Lab ID: 9255627002 | Collected: 10/19/09 16:00 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 01:11 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 10/30/09 01:11 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 10/30/09 01:11 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 10/30/09 01:11 | 74-88-4 | |
| Methylene Chloride | ND ug/L | | 2.0 | 0.97 | 1 | | 10/30/09 01:11 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 10/30/09 01:11 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 01:11 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 10/30/09 01:11 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 10/30/09 01:11 | 79-34-5 | |
| Tetrachloroethene | 0.83J ug/L | | 1.0 | 0.46 | 1 | | 10/30/09 01:11 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 01:11 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 10/30/09 01:11 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 10/30/09 01:11 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 10/30/09 01:11 | 79-01-6 | |
| Trichlorofluoromethane | 0.60J ug/L | | 1.0 | 0.20 | 1 | | 10/30/09 01:11 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 10/30/09 01:11 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 10/30/09 01:11 | 108-05-4 | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 10/30/09 01:11 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 5.0 | 0.66 | 1 | | 10/30/09 01:11 | 1330-20-7 | |
| m&p-Xylene | ND ug/L | | 2.0 | 0.66 | 1 | | 10/30/09 01:11 | 1330-20-7 | |
| o-Xylene | ND ug/L | | 1.0 | 0.23 | 1 | | 10/30/09 01:11 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 90 % | | 87-109 | | 1 | | 10/30/09 01:11 | 460-00-4 | |
| Dibromofluoromethane (S) | 92 % | | 85-115 | | 1 | | 10/30/09 01:11 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 102 % | | 79-120 | | 1 | | 10/30/09 01:11 | 17060-07-0 | |
| Toluene-d8 (S) | 94 % | | 70-120 | | 1 | | 10/30/09 01:11 | 2037-26-5 | |

ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-3R | Lab ID: 9255627003 | Collected: 10/19/09 14:00 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|--|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 ICP Groundwater | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Antimony | ND ug/L | | 6.0 | 2.6 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-36-0 | |
| Arsenic | ND ug/L | | 10.0 | 2.7 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-38-2 | |
| Barium | 85.2J ug/L | | 100 | 0.20 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-39-3 | |
| Beryllium | ND ug/L | | 1.0 | 0.10 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-41-7 | |
| Cadmium | 0.90J ug/L | | 1.0 | 0.50 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-43-9 | |
| Chromium | ND ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-47-3 | |
| Cobalt | ND ug/L | | 10.0 | 0.60 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-48-4 | |
| Copper | 0.53J ug/L | | 10.0 | 0.30 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-50-8 | |
| Lead | ND ug/L | | 10.0 | 4.0 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7439-92-1 | |
| Nickel | 8.1J ug/L | | 50.0 | 1.7 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-02-0 | |
| Selenium | ND ug/L | | 10.0 | 3.8 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7782-49-2 | |
| Silver | 0.37J ug/L | | 10.0 | 0.10 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-22-4 | |
| Thallium | ND ug/L | | 5.5 | 3.0 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-28-0 | |
| Vanadium | 0.39J ug/L | | 25.0 | 0.20 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-62-2 | |
| Zinc | 10.9 ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/24/09 00:18 | 7440-66-6 | Z2 |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND ug/L | | 100 | 2.2 | 1 | | 10/30/09 01:30 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 10/30/09 01:30 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 01:30 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 10/30/09 01:30 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 10/30/09 01:30 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 10/30/09 01:30 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 10/30/09 01:30 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 10/30/09 01:30 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 10/30/09 01:30 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 01:30 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 10/30/09 01:30 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 10/30/09 01:30 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 10/30/09 01:30 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 10/30/09 01:30 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 10/30/09 01:30 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 10/30/09 01:30 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 01:30 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 10/30/09 01:30 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 10/30/09 01:30 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 10/30/09 01:30 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 10/30/09 01:30 | 110-57-6 | |
| 1,1-Dichloroethane | 2.2J ug/L | | 5.0 | 0.32 | 1 | | 10/30/09 01:30 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 10/30/09 01:30 | 107-06-2 | |
| 1,1-Dichloroethylene | ND ug/L | | 5.0 | 0.56 | 1 | | 10/30/09 01:30 | 75-35-4 | |
| cis-1,2-Dichloroethylene | 1.3J ug/L | | 5.0 | 0.19 | 1 | | 10/30/09 01:30 | 156-59-2 | |
| trans-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.49 | 1 | | 10/30/09 01:30 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 01:30 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 10/30/09 01:30 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 10/30/09 01:30 | 10061-01-5 | |

Date: 11/24/2009 05:01 PM

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ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-3R | Lab ID: 9255627003 | Collected: 10/19/09 14:00 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 01:30 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 10/30/09 01:30 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 10/30/09 01:30 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 10/30/09 01:30 | 74-88-4 | |
| Methylene Chloride | ND ug/L | | 2.0 | 0.97 | 1 | | 10/30/09 01:30 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 10/30/09 01:30 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 01:30 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 10/30/09 01:30 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 10/30/09 01:30 | 79-34-5 | |
| Tetrachloroethene | 0.56J ug/L | | 1.0 | 0.46 | 1 | | 10/30/09 01:30 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 01:30 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 10/30/09 01:30 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 10/30/09 01:30 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 10/30/09 01:30 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 10/30/09 01:30 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 10/30/09 01:30 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 10/30/09 01:30 | 108-05-4 | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 10/30/09 01:30 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 5.0 | 0.66 | 1 | | 10/30/09 01:30 | 1330-20-7 | |
| m&p-Xylene | ND ug/L | | 2.0 | 0.66 | 1 | | 10/30/09 01:30 | 1330-20-7 | |
| o-Xylene | ND ug/L | | 1.0 | 0.23 | 1 | | 10/30/09 01:30 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 96 % | | 87-109 | | 1 | | 10/30/09 01:30 | 460-00-4 | |
| Dibromofluoromethane (S) | 102 % | | 85-115 | | 1 | | 10/30/09 01:30 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 102 % | | 79-120 | | 1 | | 10/30/09 01:30 | 17060-07-0 | |
| Toluene-d8 (S) | 94 % | | 70-120 | | 1 | | 10/30/09 01:30 | 2037-26-5 | |

ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-4S | Lab ID: 9255627004 | Collected: 10/19/09 15:25 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|--|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 ICP Groundwater | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Antimony | ND ug/L | | 6.0 | 2.6 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-36-0 | |
| Arsenic | ND ug/L | | 10.0 | 2.7 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-38-2 | |
| Barium | 63.8J ug/L | | 100 | 0.20 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-39-3 | |
| Beryllium | 0.17J ug/L | | 1.0 | 0.10 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-41-7 | |
| Cadmium | 0.84J ug/L | | 1.0 | 0.50 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-43-9 | |
| Chromium | 4.0J ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-47-3 | |
| Cobalt | 1.0J ug/L | | 10.0 | 0.60 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-48-4 | |
| Copper | 2.7J ug/L | | 10.0 | 0.30 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-50-8 | |
| Lead | ND ug/L | | 10.0 | 4.0 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7439-92-1 | |
| Nickel | 3.3J ug/L | | 50.0 | 1.7 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-02-0 | |
| Selenium | ND ug/L | | 10.0 | 3.8 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7782-49-2 | |
| Silver | ND ug/L | | 10.0 | 0.10 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-22-4 | |
| Thallium | ND ug/L | | 5.5 | 3.0 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-28-0 | |
| Vanadium | 4.3J ug/L | | 25.0 | 0.20 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-62-2 | |
| Zinc | 34.7 ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/24/09 00:22 | 7440-66-6 | Z2 |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND ug/L | | 100 | 2.2 | 1 | | 10/30/09 01:49 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 10/30/09 01:49 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 01:49 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 10/30/09 01:49 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 10/30/09 01:49 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 10/30/09 01:49 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 10/30/09 01:49 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 10/30/09 01:49 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 10/30/09 01:49 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 01:49 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 10/30/09 01:49 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 10/30/09 01:49 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 10/30/09 01:49 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 10/30/09 01:49 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 10/30/09 01:49 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 10/30/09 01:49 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 01:49 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 10/30/09 01:49 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 10/30/09 01:49 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 10/30/09 01:49 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 10/30/09 01:49 | 110-57-6 | |
| 1,1-Dichloroethane | ND ug/L | | 5.0 | 0.32 | 1 | | 10/30/09 01:49 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 10/30/09 01:49 | 107-06-2 | |
| 1,1-Dichloroethylene | ND ug/L | | 5.0 | 0.56 | 1 | | 10/30/09 01:49 | 75-35-4 | |
| cis-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.19 | 1 | | 10/30/09 01:49 | 156-59-2 | |
| trans-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.49 | 1 | | 10/30/09 01:49 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 01:49 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 10/30/09 01:49 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 10/30/09 01:49 | 10061-01-5 | |

Date: 11/24/2009 05:01 PM

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ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-4S | Lab ID: 9255627004 | Collected: 10/19/09 15:25 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 01:49 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 10/30/09 01:49 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 10/30/09 01:49 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 10/30/09 01:49 | 74-88-4 | |
| Methylene Chloride | ND ug/L | | 2.0 | 0.97 | 1 | | 10/30/09 01:49 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 10/30/09 01:49 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 01:49 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 10/30/09 01:49 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 10/30/09 01:49 | 79-34-5 | |
| Tetrachloroethene | ND ug/L | | 1.0 | 0.46 | 1 | | 10/30/09 01:49 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 01:49 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 10/30/09 01:49 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 10/30/09 01:49 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 10/30/09 01:49 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 10/30/09 01:49 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 10/30/09 01:49 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 10/30/09 01:49 | 108-05-4 | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 10/30/09 01:49 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 5.0 | 0.66 | 1 | | 10/30/09 01:49 | 1330-20-7 | |
| m&p-Xylene | ND ug/L | | 2.0 | 0.66 | 1 | | 10/30/09 01:49 | 1330-20-7 | |
| o-Xylene | ND ug/L | | 1.0 | 0.23 | 1 | | 10/30/09 01:49 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 94 % | | 87-109 | | 1 | | 10/30/09 01:49 | 460-00-4 | |
| Dibromofluoromethane (S) | 95 % | | 85-115 | | 1 | | 10/30/09 01:49 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 100 % | | 79-120 | | 1 | | 10/30/09 01:49 | 17060-07-0 | |
| Toluene-d8 (S) | 89 % | | 70-120 | | 1 | | 10/30/09 01:49 | 2037-26-5 | |

ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-4D | Lab ID: 9255627005 | Collected: 10/19/09 14:40 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|--|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 ICP Groundwater | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Antimony | ND ug/L | | 6.0 | 2.6 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-36-0 | |
| Arsenic | ND ug/L | | 10.0 | 2.7 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-38-2 | |
| Barium | 35.6J ug/L | | 100 | 0.20 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-39-3 | |
| Beryllium | ND ug/L | | 1.0 | 0.10 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-41-7 | |
| Cadmium | 1.9 ug/L | | 1.0 | 0.50 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-43-9 | |
| Chromium | ND ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-47-3 | |
| Cobalt | ND ug/L | | 10.0 | 0.60 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-48-4 | |
| Copper | 3.1J ug/L | | 10.0 | 0.30 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-50-8 | |
| Lead | ND ug/L | | 10.0 | 4.0 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7439-92-1 | |
| Nickel | ND ug/L | | 50.0 | 1.7 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-02-0 | |
| Selenium | ND ug/L | | 10.0 | 3.8 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7782-49-2 | |
| Silver | ND ug/L | | 10.0 | 0.10 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-22-4 | |
| Thallium | ND ug/L | | 5.5 | 3.0 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-28-0 | |
| Vanadium | ND ug/L | | 25.0 | 0.20 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-62-2 | |
| Zinc | 10.8 ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/24/09 00:25 | 7440-66-6 | Z2 |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | 9.8J ug/L | | 100 | 2.2 | 1 | | 10/30/09 02:08 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 10/30/09 02:08 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 02:08 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 10/30/09 02:08 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 10/30/09 02:08 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 10/30/09 02:08 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 10/30/09 02:08 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 10/30/09 02:08 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 10/30/09 02:08 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 02:08 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 10/30/09 02:08 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 10/30/09 02:08 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 10/30/09 02:08 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 10/30/09 02:08 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 10/30/09 02:08 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 10/30/09 02:08 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 02:08 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 10/30/09 02:08 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 10/30/09 02:08 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 10/30/09 02:08 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 10/30/09 02:08 | 110-57-6 | |
| 1,1-Dichloroethane | ND ug/L | | 5.0 | 0.32 | 1 | | 10/30/09 02:08 | 75-34-3 | |
| 1,2-Dichloroethane | 0.32J ug/L | | 1.0 | 0.12 | 1 | | 10/30/09 02:08 | 107-06-2 | |
| 1,1-Dichloroethylene | ND ug/L | | 5.0 | 0.56 | 1 | | 10/30/09 02:08 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND ug/L | | 5.0 | 0.19 | 1 | | 10/30/09 02:08 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND ug/L | | 5.0 | 0.49 | 1 | | 10/30/09 02:08 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 02:08 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 10/30/09 02:08 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 10/30/09 02:08 | 10061-01-5 | |

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ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-4D | Lab ID: 9255627005 | Collected: 10/19/09 14:40 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 02:08 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 10/30/09 02:08 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 10/30/09 02:08 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 10/30/09 02:08 | 74-88-4 | |
| Methylene Chloride | ND ug/L | | 2.0 | 0.97 | 1 | | 10/30/09 02:08 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 10/30/09 02:08 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 02:08 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 10/30/09 02:08 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 10/30/09 02:08 | 79-34-5 | |
| Tetrachloroethene | ND ug/L | | 1.0 | 0.46 | 1 | | 10/30/09 02:08 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 02:08 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 10/30/09 02:08 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 10/30/09 02:08 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 10/30/09 02:08 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 10/30/09 02:08 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 10/30/09 02:08 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 10/30/09 02:08 | 108-05-4 | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 10/30/09 02:08 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 2.0 | 0.66 | 1 | | 10/30/09 02:08 | 1330-20-7 | |
| m&p-Xylene | ND ug/L | | 2.0 | 0.66 | 1 | | 10/30/09 02:08 | 1330-20-7 | |
| o-Xylene | ND ug/L | | 1.0 | 0.23 | 1 | | 10/30/09 02:08 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 94 % | | 87-109 | | 1 | | 10/30/09 02:08 | 460-00-4 | |
| Dibromofluoromethane (S) | 95 % | | 85-115 | | 1 | | 10/30/09 02:08 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 98 % | | 79-120 | | 1 | | 10/30/09 02:08 | 17060-07-0 | |
| Toluene-d8 (S) | 92 % | | 70-120 | | 1 | | 10/30/09 02:08 | 2037-26-5 | |

ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-5 | Lab ID: 9255627006 | Collected: 10/19/09 17:05 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|--|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 ICP Groundwater | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Antimony | ND ug/L | | 6.0 | 2.6 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-36-0 | |
| Arsenic | ND ug/L | | 10.0 | 2.7 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-38-2 | |
| Barium | 39.7 ug/L | | 100 | 0.20 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-39-3 | |
| Beryllium | ND ug/L | | 1.0 | 0.10 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-41-7 | |
| Cadmium | 0.56J ug/L | | 1.0 | 0.50 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-43-9 | |
| Chromium | 1.4J ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-47-3 | |
| Cobalt | 2.9J ug/L | | 10.0 | 0.60 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-48-4 | |
| Copper | 0.69J ug/L | | 10.0 | 0.30 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-50-8 | |
| Lead | ND ug/L | | 10.0 | 4.0 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7439-92-1 | |
| Nickel | 1.8J ug/L | | 50.0 | 1.7 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-02-0 | |
| Selenium | ND ug/L | | 10.0 | 3.8 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7782-49-2 | |
| Silver | 0.22J ug/L | | 10.0 | 0.10 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-22-4 | |
| Thallium | ND ug/L | | 5.5 | 3.0 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-28-0 | |
| Vanadium | 3.2J ug/L | | 25.0 | 0.20 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-62-2 | |
| Zinc | 7.3J ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/26/09 17:33 | 7440-66-6 | Z2 |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND ug/L | | 100 | 2.2 | 1 | | 10/30/09 02:27 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 10/30/09 02:27 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 02:27 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 10/30/09 02:27 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 10/30/09 02:27 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 10/30/09 02:27 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 10/30/09 02:27 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 10/30/09 02:27 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 10/30/09 02:27 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 02:27 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 10/30/09 02:27 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 10/30/09 02:27 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 10/30/09 02:27 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 10/30/09 02:27 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 10/30/09 02:27 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 10/30/09 02:27 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 02:27 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 10/30/09 02:27 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 10/30/09 02:27 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 10/30/09 02:27 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 10/30/09 02:27 | 110-57-6 | |
| 1,1-Dichloroethane | ND ug/L | | 5.0 | 0.32 | 1 | | 10/30/09 02:27 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 10/30/09 02:27 | 107-06-2 | |
| 1,1-Dichloroethylene | ND ug/L | | 5.0 | 0.56 | 1 | | 10/30/09 02:27 | 75-35-4 | |
| cis-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.19 | 1 | | 10/30/09 02:27 | 156-59-2 | |
| trans-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.49 | 1 | | 10/30/09 02:27 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 02:27 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 10/30/09 02:27 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 10/30/09 02:27 | 10061-01-5 | |

Date: 11/24/2009 05:01 PM

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ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-5 | Lab ID: 9255627006 | Collected: 10/19/09 17:05 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 02:27 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 10/30/09 02:27 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 10/30/09 02:27 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 10/30/09 02:27 | 74-88-4 | |
| Methylene Chloride | ND ug/L | | 2.0 | 0.97 | 1 | | 10/30/09 02:27 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 10/30/09 02:27 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 02:27 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 10/30/09 02:27 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 10/30/09 02:27 | 79-34-5 | |
| Tetrachloroethene | ND ug/L | | 1.0 | 0.46 | 1 | | 10/30/09 02:27 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 02:27 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 10/30/09 02:27 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 10/30/09 02:27 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 10/30/09 02:27 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 10/30/09 02:27 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 10/30/09 02:27 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 10/30/09 02:27 | 108-05-4 | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 10/30/09 02:27 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 5.0 | 0.66 | 1 | | 10/30/09 02:27 | 1330-20-7 | |
| m&p-Xylene | ND ug/L | | 2.0 | 0.66 | 1 | | 10/30/09 02:27 | 1330-20-7 | |
| o-Xylene | ND ug/L | | 1.0 | 0.23 | 1 | | 10/30/09 02:27 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 94 % | | 87-109 | | 1 | | 10/30/09 02:27 | 460-00-4 | |
| Dibromofluoromethane (S) | 97 % | | 85-115 | | 1 | | 10/30/09 02:27 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 102 % | | 79-120 | | 1 | | 10/30/09 02:27 | 17060-07-0 | |
| Toluene-d8 (S) | 91 % | | 70-120 | | 1 | | 10/30/09 02:27 | 2037-26-5 | |

ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-6R | Lab ID: 9255627007 | Collected: 10/19/09 17:40 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|--|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 ICP Groundwater | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Antimony | ND ug/L | | 6.0 | 2.6 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-36-0 | |
| Arsenic | ND ug/L | | 10.0 | 2.7 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-38-2 | |
| Barium | 35.0J ug/L | | 100 | 0.20 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-39-3 | |
| Beryllium | ND ug/L | | 1.0 | 0.10 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-41-7 | |
| Cadmium | 0.60J ug/L | | 1.0 | 0.50 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-43-9 | |
| Chromium | 1.5J ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-47-3 | |
| Cobalt | 0.92J ug/L | | 10.0 | 0.60 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-48-4 | |
| Copper | 1.3J ug/L | | 10.0 | 0.30 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-50-8 | |
| Lead | ND ug/L | | 10.0 | 4.0 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7439-92-1 | |
| Nickel | 2.7J ug/L | | 50.0 | 1.7 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-02-0 | |
| Selenium | ND ug/L | | 10.0 | 3.8 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7782-49-2 | |
| Silver | 0.22J ug/L | | 10.0 | 0.10 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-22-4 | |
| Thallium | ND ug/L | | 5.5 | 3.0 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-28-0 | |
| Vanadium | 2.4J ug/L | | 25.0 | 0.20 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-62-2 | |
| Zinc | 10.3 ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/26/09 17:36 | 7440-66-6 | Z2 |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND ug/L | | 100 | 2.2 | 1 | | 10/30/09 12:09 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 10/30/09 12:09 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 12:09 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 10/30/09 12:09 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 10/30/09 12:09 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 10/30/09 12:09 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 10/30/09 12:09 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 10/30/09 12:09 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 10/30/09 12:09 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 12:09 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 10/30/09 12:09 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 10/30/09 12:09 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 10/30/09 12:09 | 67-66-3 | |
| Chloromethane | 0.90J ug/L | | 1.0 | 0.11 | 1 | | 10/30/09 12:09 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 10/30/09 12:09 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 10/30/09 12:09 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 12:09 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 10/30/09 12:09 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 10/30/09 12:09 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 10/30/09 12:09 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 10/30/09 12:09 | 110-57-6 | |
| 1,1-Dichloroethane | ND ug/L | | 5.0 | 0.32 | 1 | | 10/30/09 12:09 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 10/30/09 12:09 | 107-06-2 | |
| 1,1-Dichloroethylene | ND ug/L | | 5.0 | 0.56 | 1 | | 10/30/09 12:09 | 75-35-4 | |
| cis-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.19 | 1 | | 10/30/09 12:09 | 156-59-2 | |
| trans-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.49 | 1 | | 10/30/09 12:09 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 12:09 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 10/30/09 12:09 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 10/30/09 12:09 | 10061-01-5 | |

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ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: MW-6R | Lab ID: 9255627007 | Collected: 10/19/09 17:40 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 12:09 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 10/30/09 12:09 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 10/30/09 12:09 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 10/30/09 12:09 | 74-88-4 | |
| Methylene Chloride | ND ug/L | | 2.0 | 0.97 | 1 | | 10/30/09 12:09 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 10/30/09 12:09 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 12:09 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 10/30/09 12:09 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 10/30/09 12:09 | 79-34-5 | |
| Tetrachloroethene | 0.58J ug/L | | 1.0 | 0.46 | 1 | | 10/30/09 12:09 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 12:09 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 10/30/09 12:09 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 10/30/09 12:09 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 10/30/09 12:09 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 10/30/09 12:09 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 10/30/09 12:09 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 10/30/09 12:09 | 108-05-4 | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 10/30/09 12:09 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 5.0 | 0.66 | 1 | | 10/30/09 12:09 | 1330-20-7 | |
| m&p-Xylene | ND ug/L | | 2.0 | 0.66 | 1 | | 10/30/09 12:09 | 1330-20-7 | |
| o-Xylene | ND ug/L | | 1.0 | 0.23 | 1 | | 10/30/09 12:09 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 106 % | | 87-109 | | 1 | | 10/30/09 12:09 | 460-00-4 | |
| Dibromofluoromethane (S) | 97 % | | 85-115 | | 1 | | 10/30/09 12:09 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 103 % | | 79-120 | | 1 | | 10/30/09 12:09 | 17060-07-0 | |
| Toluene-d8 (S) | 87 % | | 70-120 | | 1 | | 10/30/09 12:09 | 2037-26-5 | |

ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: SWN-1 | Lab ID: 9255627008 | Collected: 10/19/09 13:40 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|--|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 ICP Groundwater | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Antimony | ND ug/L | | 6.0 | 2.6 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-36-0 | |
| Arsenic | ND ug/L | | 10.0 | 2.7 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-38-2 | |
| Barium | 15.6J ug/L | | 100 | 0.20 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-39-3 | |
| Beryllium | ND ug/L | | 1.0 | 0.10 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-41-7 | |
| Cadmium | ND ug/L | | 1.0 | 0.50 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-43-9 | |
| Chromium | 2.0J ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-47-3 | |
| Cobalt | 0.81J ug/L | | 10.0 | 0.60 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-48-4 | |
| Copper | ND ug/L | | 10.0 | 0.30 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-50-8 | |
| Lead | ND ug/L | | 10.0 | 4.0 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7439-92-1 | |
| Nickel | ND ug/L | | 50.0 | 1.7 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-02-0 | |
| Selenium | ND ug/L | | 10.0 | 3.8 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7782-49-2 | |
| Silver | ND ug/L | | 10.0 | 0.10 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-22-4 | |
| Thallium | ND ug/L | | 5.5 | 3.0 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-28-0 | |
| Vanadium | 0.60J ug/L | | 25.0 | 0.20 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-62-2 | |
| Zinc | 5.1J ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/26/09 17:40 | 7440-66-6 | Z2 |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND ug/L | | 100 | 2.2 | 1 | | 10/30/09 03:05 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 10/30/09 03:05 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 03:05 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 10/30/09 03:05 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 10/30/09 03:05 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 10/30/09 03:05 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 10/30/09 03:05 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 10/30/09 03:05 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 10/30/09 03:05 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 03:05 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 10/30/09 03:05 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 10/30/09 03:05 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 10/30/09 03:05 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 10/30/09 03:05 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 10/30/09 03:05 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 10/30/09 03:05 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 03:05 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 10/30/09 03:05 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 10/30/09 03:05 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 10/30/09 03:05 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 10/30/09 03:05 | 110-57-6 | |
| 1,1-Dichloroethane | ND ug/L | | 5.0 | 0.32 | 1 | | 10/30/09 03:05 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 10/30/09 03:05 | 107-06-2 | |
| 1,1-Dichloroethylene | ND ug/L | | 5.0 | 0.56 | 1 | | 10/30/09 03:05 | 75-35-4 | |
| cis-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.19 | 1 | | 10/30/09 03:05 | 156-59-2 | |
| trans-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.49 | 1 | | 10/30/09 03:05 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 03:05 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 10/30/09 03:05 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 10/30/09 03:05 | 10061-01-5 | |

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ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: SWN-1 | Lab ID: 9255627008 | Collected: 10/19/09 13:40 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 03:05 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 10/30/09 03:05 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 10/30/09 03:05 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 10/30/09 03:05 | 74-88-4 | |
| Methylene Chloride | ND ug/L | | 2.0 | 0.97 | 1 | | 10/30/09 03:05 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 10/30/09 03:05 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 03:05 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 10/30/09 03:05 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 10/30/09 03:05 | 79-34-5 | |
| Tetrachloroethene | ND ug/L | | 1.0 | 0.46 | 1 | | 10/30/09 03:05 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 03:05 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 10/30/09 03:05 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 10/30/09 03:05 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 10/30/09 03:05 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 10/30/09 03:05 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 10/30/09 03:05 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 10/30/09 03:05 | 108-05-4 | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 10/30/09 03:05 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 5.0 | 0.66 | 1 | | 10/30/09 03:05 | 1330-20-7 | |
| m&p-Xylene | ND ug/L | | 2.0 | 0.66 | 1 | | 10/30/09 03:05 | 1330-20-7 | |
| o-Xylene | ND ug/L | | 1.0 | 0.23 | 1 | | 10/30/09 03:05 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 101 % | | 87-109 | | 1 | | 10/30/09 03:05 | 460-00-4 | |
| Dibromofluoromethane (S) | 110 % | | 85-115 | | 1 | | 10/30/09 03:05 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 102 % | | 79-120 | | 1 | | 10/30/09 03:05 | 17060-07-0 | |
| Toluene-d8 (S) | 88 % | | 70-120 | | 1 | | 10/30/09 03:05 | 2037-26-5 | |

ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: SWN-2 | Lab ID: 9255627009 | Collected: 10/19/09 15:40 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|--|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 ICP Groundwater | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Antimony | ND ug/L | | 6.0 | 2.6 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-36-0 | |
| Arsenic | ND ug/L | | 10.0 | 2.7 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-38-2 | |
| Barium | 13.9J ug/L | | 100 | 0.20 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-39-3 | |
| Beryllium | ND ug/L | | 1.0 | 0.10 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-41-7 | |
| Cadmium | ND ug/L | | 1.0 | 0.50 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-43-9 | |
| Chromium | 0.67J ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-47-3 | |
| Cobalt | 0.75J ug/L | | 10.0 | 0.60 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-48-4 | |
| Copper | 0.47J ug/L | | 10.0 | 0.30 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-50-8 | |
| Lead | ND ug/L | | 10.0 | 4.0 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7439-92-1 | |
| Nickel | ND ug/L | | 50.0 | 1.7 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-02-0 | |
| Selenium | ND ug/L | | 10.0 | 3.8 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7782-49-2 | |
| Silver | 0.28J ug/L | | 10.0 | 0.10 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-22-4 | |
| Thallium | ND ug/L | | 5.5 | 3.0 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-28-0 | |
| Vanadium | 0.65J ug/L | | 25.0 | 0.20 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-62-2 | |
| Zinc | 6.9J ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/26/09 17:43 | 7440-66-6 | Z2 |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND ug/L | | 100 | 2.2 | 1 | | 10/30/09 03:23 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 10/30/09 03:23 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 03:23 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 10/30/09 03:23 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 10/30/09 03:23 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 10/30/09 03:23 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 10/30/09 03:23 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 10/30/09 03:23 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 10/30/09 03:23 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 03:23 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 10/30/09 03:23 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 10/30/09 03:23 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 10/30/09 03:23 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 10/30/09 03:23 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 10/30/09 03:23 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 10/30/09 03:23 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 03:23 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 10/30/09 03:23 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 10/30/09 03:23 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 10/30/09 03:23 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 10/30/09 03:23 | 110-57-6 | |
| 1,1-Dichloroethane | ND ug/L | | 5.0 | 0.32 | 1 | | 10/30/09 03:23 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 10/30/09 03:23 | 107-06-2 | |
| 1,1-Dichloroethylene | ND ug/L | | 5.0 | 0.56 | 1 | | 10/30/09 03:23 | 75-35-4 | |
| cis-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.19 | 1 | | 10/30/09 03:23 | 156-59-2 | |
| trans-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.49 | 1 | | 10/30/09 03:23 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 03:23 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 10/30/09 03:23 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 10/30/09 03:23 | 10061-01-5 | |

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ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: SWN-2 | Lab ID: 9255627009 | Collected: 10/19/09 15:40 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 03:23 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 10/30/09 03:23 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 10/30/09 03:23 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 10/30/09 03:23 | 74-88-4 | |
| Methylene Chloride | ND ug/L | | 2.0 | 0.97 | 1 | | 10/30/09 03:23 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 10/30/09 03:23 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 03:23 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 10/30/09 03:23 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 10/30/09 03:23 | 79-34-5 | |
| Tetrachloroethene | ND ug/L | | 1.0 | 0.46 | 1 | | 10/30/09 03:23 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 03:23 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 10/30/09 03:23 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 10/30/09 03:23 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 10/30/09 03:23 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 10/30/09 03:23 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 10/30/09 03:23 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 10/30/09 03:23 | 108-05-4 | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 10/30/09 03:23 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 5.0 | 0.66 | 1 | | 10/30/09 03:23 | 1330-20-7 | |
| m&p-Xylene | ND ug/L | | 2.0 | 0.66 | 1 | | 10/30/09 03:23 | 1330-20-7 | |
| o-Xylene | ND ug/L | | 1.0 | 0.23 | 1 | | 10/30/09 03:23 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 91 % | | 87-109 | | 1 | | 10/30/09 03:23 | 460-00-4 | |
| Dibromofluoromethane (S) | 98 % | | 85-115 | | 1 | | 10/30/09 03:23 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 107 % | | 79-120 | | 1 | | 10/30/09 03:23 | 17060-07-0 | |
| Toluene-d8 (S) | 88 % | | 70-120 | | 1 | | 10/30/09 03:23 | 2037-26-5 | |

ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: LAGOON | Lab ID: 9255627010 | Collected: 10/19/09 17:55 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|--|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 ICP Groundwater | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Antimony | ND ug/L | | 6.0 | 2.6 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-36-0 | |
| Arsenic | ND ug/L | | 10.0 | 2.7 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-38-2 | |
| Barium | 34.4J ug/L | | 100 | 0.20 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-39-3 | |
| Beryllium | ND ug/L | | 1.0 | 0.10 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-41-7 | |
| Cadmium | ND ug/L | | 1.0 | 0.50 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-43-9 | |
| Chromium | ND ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-47-3 | |
| Cobalt | 6.7J ug/L | | 10.0 | 0.60 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-48-4 | |
| Copper | ND ug/L | | 10.0 | 0.30 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-50-8 | |
| Lead | ND ug/L | | 10.0 | 4.0 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7439-92-1 | |
| Nickel | 3.5J ug/L | | 50.0 | 1.7 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-02-0 | |
| Selenium | ND ug/L | | 10.0 | 3.8 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7782-49-2 | |
| Silver | 0.49J ug/L | | 10.0 | 0.10 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-22-4 | |
| Thallium | ND ug/L | | 5.5 | 3.0 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-28-0 | |
| Vanadium | 0.50J ug/L | | 25.0 | 0.20 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-62-2 | |
| Zinc | 4.3J ug/L | | 10.0 | 0.40 | 1 | 10/23/09 10:30 | 10/26/09 17:47 | 7440-66-6 | Z2 |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND ug/L | | 100 | 2.2 | 1 | | 10/30/09 03:42 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 10/30/09 03:42 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 03:42 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 10/30/09 03:42 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 10/30/09 03:42 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 10/30/09 03:42 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 10/30/09 03:42 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 10/30/09 03:42 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 10/30/09 03:42 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 10/30/09 03:42 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 10/30/09 03:42 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 10/30/09 03:42 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 10/30/09 03:42 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 10/30/09 03:42 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 10/30/09 03:42 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 10/30/09 03:42 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 03:42 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 10/30/09 03:42 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 10/30/09 03:42 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 10/30/09 03:42 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 10/30/09 03:42 | 110-57-6 | |
| 1,1-Dichloroethane | ND ug/L | | 5.0 | 0.32 | 1 | | 10/30/09 03:42 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 10/30/09 03:42 | 107-06-2 | |
| 1,1-Dichloroethylene | ND ug/L | | 5.0 | 0.56 | 1 | | 10/30/09 03:42 | 75-35-4 | |
| cis-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.19 | 1 | | 10/30/09 03:42 | 156-59-2 | |
| trans-1,2-Dichloroethylene | ND ug/L | | 5.0 | 0.49 | 1 | | 10/30/09 03:42 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 10/30/09 03:42 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 10/30/09 03:42 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 10/30/09 03:42 | 10061-01-5 | |

Date: 11/24/2009 05:01 PM

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ANALYTICAL RESULTS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Sample: LAGOON | Lab ID: 9255627010 | Collected: 10/19/09 17:55 | Received: 10/20/09 11:20 | Matrix: Water | | | | | |
|---|--------------------|---------------------------------|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 03:42 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 10/30/09 03:42 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 10/30/09 03:42 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 10/30/09 03:42 | 74-88-4 | |
| Methylene Chloride | ND ug/L | | 2.0 | 0.97 | 1 | | 10/30/09 03:42 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 10/30/09 03:42 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 03:42 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 10/30/09 03:42 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 10/30/09 03:42 | 79-34-5 | |
| Tetrachloroethene | ND ug/L | | 1.0 | 0.46 | 1 | | 10/30/09 03:42 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 10/30/09 03:42 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 10/30/09 03:42 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 10/30/09 03:42 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 10/30/09 03:42 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 10/30/09 03:42 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 10/30/09 03:42 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 10/30/09 03:42 | 108-05-4 | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 10/30/09 03:42 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 5.0 | 0.66 | 1 | | 10/30/09 03:42 | 1330-20-7 | |
| m&p-Xylene | ND ug/L | | 2.0 | 0.66 | 1 | | 10/30/09 03:42 | 1330-20-7 | |
| o-Xylene | ND ug/L | | 1.0 | 0.23 | 1 | | 10/30/09 03:42 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 91 % | | 87-109 | | 1 | | 10/30/09 03:42 | 460-00-4 | |
| Dibromofluoromethane (S) | 96 % | | 85-115 | | 1 | | 10/30/09 03:42 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 102 % | | 79-120 | | 1 | | 10/30/09 03:42 | 17060-07-0 | |
| Toluene-d8 (S) | 92 % | | 70-120 | | 1 | | 10/30/09 03:42 | 2037-26-5 | |
| 5210B BOD, 5 day | | Analytical Method: SM 5210B | | | | | | | |
| BOD, 5 day | 36.0 mg/L | | 2.0 | 2.0 | 1 | 10/21/09 01:14 | 10/26/09 09:30 | | B2 |
| 353.2 Nitrogen, NO₂/NO₃ unpres | | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND ug/L | | 10000 | 100 | 1 | | 10/21/09 10:30 | | |
| 365.1 Phosphorus, Total | | Analytical Method: EPA 365.1 | | | | | | | |
| Phosphorus | ND ug/L | | 100 | 100 | 1 | | 10/29/09 10:40 | 7723-14-0 | |
| 5220D COD | | Analytical Method: SM 5220D | | | | | | | |
| Chemical Oxygen Demand | ND ug/L | | 25000 | 25000 | 1 | | 10/31/09 13:00 | | |
| ASTM D516-90 Sulfate Water | | Analytical Method: ASTM D516-90 | | | | | | | |
| Sulfate | 11300J ug/L | | 250000 | 5000 | 1 | | 10/27/09 15:55 | 14808-79-8 | |

QUALITY CONTROL DATA

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| | | | |
|-------------------------|---|-----------------------|-------------------------|
| QC Batch: | MPRP/5255 | Analysis Method: | EPA 6010 |
| QC Batch Method: | EPA 3010 | Analysis Description: | 6010 MET NC Groundwater |
| Associated Lab Samples: | 9255627001, 9255627002, 9255627003, 9255627004, 9255627005, 9255627006, 9255627007, 9255627008, 9255627009, 9255627010 | | |

METHOD BLANK: 354846 Matrix: Water

Associated Lab Samples: 9255627001, 9255627002, 9255627003, 9255627004, 9255627005, 9255627006, 9255627007, 9255627008,
9255627009, 9255627010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Antimony | ug/L | ND | 6.0 | 10/23/09 23:09 | |
| Arsenic | ug/L | ND | 10.0 | 10/23/09 23:09 | |
| Barium | ug/L | ND | 100 | 10/23/09 23:09 | |
| Beryllium | ug/L | ND | 1.0 | 10/23/09 23:09 | |
| Cadmium | ug/L | ND | 1.0 | 10/23/09 23:09 | |
| Chromium | ug/L | ND | 10.0 | 10/23/09 23:09 | |
| Cobalt | ug/L | ND | 10.0 | 10/23/09 23:09 | |
| Copper | ug/L | ND | 10.0 | 10/23/09 23:09 | |
| Lead | ug/L | ND | 10.0 | 10/23/09 23:09 | |
| Nickel | ug/L | ND | 50.0 | 10/23/09 23:09 | |
| Selenium | ug/L | ND | 10.0 | 10/23/09 23:09 | |
| Silver | ug/L | ND | 10.0 | 10/23/09 23:09 | |
| Thallium | ug/L | ND | 5.5 | 10/23/09 23:09 | |
| Vanadium | ug/L | ND | 25.0 | 10/23/09 23:09 | |
| Zinc | ug/L | 1.5J | 10.0 | 10/23/09 23:09 | |

LABORATORY CONTROL SAMPLE: 354847

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Antimony | ug/L | 500 | 496 | 99 | 80-120 | |
| Arsenic | ug/L | 500 | 480 | 96 | 80-120 | |
| Barium | ug/L | 500 | 486 | 97 | 80-120 | |
| Beryllium | ug/L | 500 | 514 | 103 | 80-120 | |
| Cadmium | ug/L | 500 | 500 | 100 | 80-120 | |
| Chromium | ug/L | 500 | 499 | 100 | 80-120 | |
| Cobalt | ug/L | 500 | 493 | 99 | 80-120 | |
| Copper | ug/L | 500 | 475 | 95 | 80-120 | |
| Lead | ug/L | 500 | 490 | 98 | 80-120 | |
| Nickel | ug/L | 500 | 497 | 99 | 80-120 | |
| Selenium | ug/L | 500 | 478 | 96 | 80-120 | |
| Silver | ug/L | 250 | 251 | 100 | 80-120 | |
| Thallium | ug/L | 500 | 460 | 92 | 80-120 | |
| Vanadium | ug/L | 500 | 488 | 98 | 80-120 | |
| Zinc | ug/L | 500 | 515 | 103 | 80-120 | |

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QUALITY CONTROL DATA

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| Parameter | Units | MS | | MSD | | MS Result | % Rec | MSD % Rec | % Rec | Max | |
|-----------|-------|------------|----------------|----------------|---------------|--------------|-------|--------------|--------|-----|-----|
| | | 9255422001 | Spike Conc. | Spike Conc. | MSD Result | | | | | RPD | RPD |
| Antimony | ug/L | ND | 500 | 500 | 505 | 496 | 101 | 99 | 75-125 | 2 | 25 |
| Arsenic | ug/L | ND | 500 | 500 | 490 | 480 | 98 | 96 | 75-125 | 2 | 25 |
| Barium | ug/L | 83.0J | 500 | 500 | 571 | 563 | 98 | 96 | 75-125 | 1 | 25 |
| Beryllium | ug/L | ND | 500 | 500 | 523 | 516 | 105 | 103 | 75-125 | 1 | 25 |
| Cadmium | ug/L | 0.66J | 500 | 500 | 506 | 499 | 101 | 100 | 75-125 | 1 | 25 |
| Chromium | ug/L | ND | 500 | 500 | 504 | 499 | 101 | 100 | 75-125 | 1 | 25 |
| Cobalt | ug/L | 7.4J | 500 | 500 | 505 | 498 | 100 | 98 | 75-125 | 1 | 25 |
| Copper | ug/L | ND | 500 | 500 | 487 | 476 | 97 | 95 | 75-125 | 2 | 25 |
| Lead | ug/L | ND | 500 | 500 | 493 | 485 | 99 | 97 | 75-125 | 2 | 25 |
| Nickel | ug/L | ND | 500 | 500 | 507 | 499 | 101 | 100 | 75-125 | 2 | 25 |
| Selenium | ug/L | ND | 500 | 500 | 491 | 480 | 98 | 96 | 75-125 | 2 | 25 |
| Silver | ug/L | 0.32J | 250 | 250 | 254 | 251 | 101 | 100 | 75-125 | 1 | 25 |
| Thallium | ug/L | 4.3J | 500 | 500 | 467 | 462 | 93 | 92 | 75-125 | 1 | 25 |
| Vanadium | ug/L | 0.33J | 500 | 500 | 497 | 490 | 99 | 98 | 75-125 | 1 | 25 |
| Zinc | ug/L | 42.0 | 500 | 500 | 562 | 557 | 104 | 103 | 75-125 | 1 | 25 |

SAMPLE DUPLICATE: 354850

| Parameter | Units | 9255422002 | | Dup Result | RPD | Max | |
|-----------|-------|------------|-------|---------------|-----|-----|------------|
| | | Result | RPD | | | RPD | Qualifiers |
| Antimony | ug/L | ND | ND | | | 25 | |
| Arsenic | ug/L | 10.3 | 7.1J | 37 | | 25 | R1 |
| Barium | ug/L | 70.4J | 72.7J | 3 | | 25 | |
| Beryllium | ug/L | ND | ND | | | 25 | |
| Cadmium | ug/L | ND | ND | | | 25 | |
| Chromium | ug/L | ND | ND | | | 25 | |
| Cobalt | ug/L | 5.6J | 5.8J | 3 | | 25 | |
| Copper | ug/L | ND | ND | | | 25 | |
| Lead | ug/L | ND | ND | | | 25 | |
| Nickel | ug/L | 1.7J | 5.5J | | | 25 | |
| Selenium | ug/L | ND | ND | | | 25 | |
| Silver | ug/L | 1.8J | 1.9J | | | 25 | |
| Thallium | ug/L | 6.6 | 5.6 | 16 | | 25 | |
| Vanadium | ug/L | 1.2J | 1.1J | | | 25 | |
| Zinc | ug/L | 14.3 | 17.8 | | | 25 | |

QUALITY CONTROL DATA

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| | | | |
|-------------------------|------------|-----------------------|-----------|
| QC Batch: | WETA/6160 | Analysis Method: | SM 5220D |
| QC Batch Method: | SM 5220D | Analysis Description: | 5220D COD |
| Associated Lab Samples: | 9255627010 | | |

METHOD BLANK: 359572 Matrix: Water

Associated Lab Samples: 9255627010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|------------------------|-------|--------------|-----------------|----------------|------------|
| Chemical Oxygen Demand | ug/L | ND | 25000 | 10/31/09 13:00 | |

LABORATORY CONTROL SAMPLE: 359573

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------|------------|-----------|--------------|------------|
| Chemical Oxygen Demand | ug/L | 750000 | 736000 | 98 | 90-110 | |

MATRIX SPIKE SAMPLE: 359574

| Parameter | Units | 9255574001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------------|-------------|-----------|----------|--------------|------------|
| Chemical Oxygen Demand | ug/L | 4080 mg/L | 3750000 | 7850000 | 101 | 75-125 | |

MATRIX SPIKE SAMPLE: 359576

| Parameter | Units | 9255627010 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------------|-------------|-----------|----------|--------------|------------|
| Chemical Oxygen Demand | ug/L | ND | 750000 | 800000 | 104 | 75-125 | |

SAMPLE DUPLICATE: 359575

| Parameter | Units | 9255666005 Result | Dup Result | RPD | Max RPD | Qualifiers |
|------------------------|-------|-------------------|------------|-----|---------|------------|
| Chemical Oxygen Demand | ug/L | 83.0 mg/L | 83000 | 0 | 20 | |

SAMPLE DUPLICATE: 359577

| Parameter | Units | 9255649002 Result | Dup Result | RPD | Max RPD | Qualifiers |
|------------------------|-------|-------------------|------------|-----|---------|------------|
| Chemical Oxygen Demand | ug/L | ND | ND | | 20 | |

QUALITY CONTROL DATA

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

QC Batch: MSV/8830

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV Low Level

Associated Lab Samples: 9255627001, 9255627002, 9255627003, 9255627004, 9255627005, 9255627006, 9255627007, 9255627008, 9255627009, 9255627010

METHOD BLANK: 358492

Matrix: Water

Associated Lab Samples: 9255627001, 9255627002, 9255627003, 9255627004, 9255627005, 9255627006, 9255627007, 9255627008, 9255627009, 9255627010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 10/29/09 23:19 | |
| 1,1,1-Trichloroethane | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 3.0 | 10/29/09 23:19 | |
| 1,1,2-Trichloroethane | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 10/29/09 23:19 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/29/09 23:19 | |
| 1,2,3-Trichloropropane | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 13.0 | 10/29/09 23:19 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 10/29/09 23:19 | |
| 1,2-Dichloroethane | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| 1,2-Dichloropropane | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| 1,3-Dichloropropane | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| 1,4-Dichlorobenzene | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| 2-Butanone (MEK) | ug/L | ND | 100 | 10/29/09 23:19 | |
| 2-Hexanone | ug/L | ND | 50.0 | 10/29/09 23:19 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 100 | 10/29/09 23:19 | |
| Acetone | ug/L | ND | 100 | 10/29/09 23:19 | |
| Acrylonitrile | ug/L | ND | 200 | 10/29/09 23:19 | |
| Benzene | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| Bromochloromethane | ug/L | ND | 3.0 | 10/29/09 23:19 | |
| Bromodichloromethane | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| Bromoform | ug/L | ND | 3.0 | 10/29/09 23:19 | |
| Bromomethane | ug/L | ND | 10.0 | 10/29/09 23:19 | |
| Carbon disulfide | ug/L | ND | 100 | 10/29/09 23:19 | |
| Carbon tetrachloride | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| Chlorobenzene | ug/L | ND | 3.0 | 10/29/09 23:19 | |
| Chloroethane | ug/L | ND | 10.0 | 10/29/09 23:19 | |
| Chloroform | ug/L | ND | 5.0 | 10/29/09 23:19 | |
| Chloromethane | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/29/09 23:19 | |
| cis-1,3-Dichloropropene | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| Dibromochloromethane | ug/L | ND | 3.0 | 10/29/09 23:19 | |
| Dibromomethane | ug/L | ND | 10.0 | 10/29/09 23:19 | |
| Ethylbenzene | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| Iodomethane | ug/L | ND | 10.0 | 10/29/09 23:19 | |
| m&p-Xylene | ug/L | ND | 2.0 | 10/29/09 23:19 | |
| Methylene Chloride | ug/L | 2.2 | 2.0 | 10/29/09 23:19 | C9 |
| o-Xylene | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| Styrene | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| Tetrachloroethene | ug/L | ND | 1.0 | 10/29/09 23:19 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

METHOD BLANK: 358492

Matrix: Water

Associated Lab Samples: 9255627001, 9255627002, 9255627003, 9255627004, 9255627005, 9255627006, 9255627007, 9255627008,
9255627009, 9255627010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| Toluene | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/29/09 23:19 | |
| trans-1,3-Dichloropropene | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 100 | 10/29/09 23:19 | |
| Trichloroethene | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| Trichlorofluoromethane | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| Vinyl acetate | ug/L | ND | 50.0 | 10/29/09 23:19 | |
| Vinyl chloride | ug/L | ND | 1.0 | 10/29/09 23:19 | |
| Xylene (Total) | ug/L | ND | 5.0 | 10/29/09 23:19 | |
| 1,2-Dichloroethane-d4 (S) | % | 99 | 79-120 | 10/29/09 23:19 | |
| 4-Bromofluorobenzene (S) | % | 95 | 87-109 | 10/29/09 23:19 | |
| Dibromofluoromethane (S) | % | 98 | 85-115 | 10/29/09 23:19 | |
| Toluene-d8 (S) | % | 94 | 70-120 | 10/29/09 23:19 | |

LABORATORY CONTROL SAMPLE: 358493

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 52.2 | 104 | 83-125 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 50.1 | 100 | 80-129 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 50.7 | 101 | 73-127 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 53.8 | 108 | 77-123 | |
| 1,1-Dichloroethane | ug/L | 50 | 45.5 | 91 | 76-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 47.7 | 95 | 78-146 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 55.1 | 110 | 72-125 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 49.9 | 100 | 65-128 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 54.6 | 109 | 81-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 54.7 | 109 | 82-126 | |
| 1,2-Dichloroethane | ug/L | 50 | 52.2 | 104 | 72-126 | |
| 1,2-Dichloropropane | ug/L | 50 | 58.3 | 117 | 80-127 | |
| 1,3-Dichloropropane | ug/L | 50 | 58.6 | 117 | 79-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 53.1 | 106 | 79-125 | |
| 2-Butanone (MEK) | ug/L | 100 | 112 | 112 | 50-134 | |
| 2-Hexanone | ug/L | 100 | 114 | 114 | 58-138 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 100 | 97.4J | 97 | 70-131 | |
| Acetone | ug/L | 100 | 105 | 105 | 50-146 | |
| Acrylonitrile | ug/L | 250 | 224 | 89 | 66-124 | |
| Benzene | ug/L | 50 | 52.2 | 104 | 78-128 | |
| Bromochloromethane | ug/L | 50 | 46.7 | 93 | 73-124 | |
| Bromodichloromethane | ug/L | 50 | 49.8 | 100 | 81-125 | |
| Bromoform | ug/L | 50 | 53.0 | 106 | 71-125 | |
| Bromomethane | ug/L | 50 | 35.6 | 71 | 50-150 | |
| Carbon disulfide | ug/L | 50 | 50.2J | 100 | 54-150 | |
| Carbon tetrachloride | ug/L | 50 | 49.3 | 99 | 81-137 | |
| Chlorobenzene | ug/L | 50 | 53.2 | 106 | 82-126 | |

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QUALITY CONTROL DATA

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

LABORATORY CONTROL SAMPLE: 358493

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------------|-------|-------------|------------|-----------|--------------|------------|
| Chloroethane | ug/L | 50 | 47.7 | 95 | 69-140 | |
| Chloroform | ug/L | 50 | 45.1 | 90 | 77-129 | |
| Chloromethane | ug/L | 50 | 35.1 | 70 | 54-139 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 47.1 | 94 | 76-133 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 46.9 | 94 | 76-127 | |
| Dibromochloromethane | ug/L | 50 | 56.3 | 113 | 77-125 | |
| Dibromomethane | ug/L | 50 | 58.8 | 118 | 77-125 | |
| Ethylbenzene | ug/L | 50 | 53.3 | 107 | 80-127 | |
| Iodomethane | ug/L | 100 | 107 | 107 | 65-172 | |
| m&p-Xylene | ug/L | 100 | 112 | 112 | 82-127 | |
| Methylene Chloride | ug/L | 50 | 44.2 | 88 | 67-133 | |
| o-Xylene | ug/L | 50 | 56.9 | 114 | 83-124 | |
| Styrene | ug/L | 50 | 56.9 | 114 | 80-130 | |
| Tetrachloroethene | ug/L | 50 | 50.5 | 101 | 78-128 | |
| Toluene | ug/L | 50 | 50.0 | 100 | 76-126 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 47.8 | 96 | 78-134 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 52.7 | 105 | 75-125 | |
| trans-1,4-Dichloro-2-butene | ug/L | 50 | 54.9J | 110 | 51-140 | |
| Trichloroethene | ug/L | 50 | 56.2 | 112 | 79-127 | |
| Trichlorofluoromethane | ug/L | 50 | 42.7 | 85 | 76-148 | |
| Vinyl acetate | ug/L | 100 | 95.0 | 95 | 50-150 | |
| Vinyl chloride | ug/L | 50 | 36.9 | 74 | 67-143 | |
| Xylene (Total) | ug/L | 150 | 169 | 113 | 83-125 | |
| 1,2-Dichloroethane-d4 (S) | % | | | 100 | 79-120 | |
| 4-Bromofluorobenzene (S) | % | | | 100 | 87-109 | |
| Dibromofluoromethane (S) | % | | | 92 | 85-115 | |
| Toluene-d8 (S) | % | | | 95 | 70-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 358494 358495

| Parameter | Units | 9255627010 Result | MS | | MSD | | MS Result | MS % Rec | MSD % Rec | % Rec Limits | Max | |
|---------------------------|-------|----------------------|-------------|-------------|-----------|------------|--------------|-------------|--------------|-----------------|-----|-----|
| | | | Spike Conc. | Spike Conc. | MS Result | MSD Result | | | | | RPD | RPD |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50 | 68.5 | 58.0 | 137 | 116 | 60-150 | 17 | 30 | |
| Benzene | ug/L | ND | 50 | 50 | 52.9 | 51.1 | 106 | 102 | 74-136 | 4 | 30 | |
| Chlorobenzene | ug/L | ND | 50 | 50 | 61.5 | 60.9 | 123 | 122 | 79-135 | 1 | 30 | |
| Toluene | ug/L | ND | 50 | 50 | 52.9 | 48.5 | 106 | 97 | 73-131 | 9 | 30 | |
| Trichloroethene | ug/L | ND | 50 | 50 | 57.8 | 54.0 | 116 | 108 | 73-131 | 7 | 30 | |
| 1,2-Dichloroethane-d4 (S) | % | | | | | | 99 | 105 | 79-120 | | | |
| 4-Bromofluorobenzene (S) | % | | | | | | 102 | 99 | 87-109 | | | |
| Dibromofluoromethane (S) | % | | | | | | 99 | 93 | 85-115 | | | |
| Toluene-d8 (S) | % | | | | | | 86 | 77 | 70-120 | | | |

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QUALITY CONTROL DATA

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| | | | |
|-------------------------|------------|-----------------------|-------------------------|
| QC Batch: | WETA/6125 | Analysis Method: | EPA 365.1 |
| QC Batch Method: | EPA 365.1 | Analysis Description: | 365.1 Phosphorus, Total |
| Associated Lab Samples: | 9255627010 | | |

METHOD BLANK: 356892 Matrix: Water

Associated Lab Samples: 9255627010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|------------|-------|--------------|-----------------|----------------|------------|
| Phosphorus | ug/L | ND | 100 | 10/29/09 10:32 | |

LABORATORY CONTROL SAMPLE: 356893

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------|-------|-------------|------------|-----------|--------------|------------|
| Phosphorus | ug/L | 1000 | 1040 | 104 | 90-110 | |

MATRIX SPIKE SAMPLE: 356894

| Parameter | Units | 9255377001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|------------|-------|-------------------|-------------|-----------|----------|--------------|------------|
| Phosphorus | ug/L | 1.4 mg/L | 1000 | 2410 | 101 | 90-110 | |

MATRIX SPIKE SAMPLE: 356899

| Parameter | Units | 9255481024 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|------------|-------|-------------------|-------------|-----------|----------|--------------|------------|
| Phosphorus | ug/L | ND | 1000 | 913 | 89 | 90-110 | M0 |

SAMPLE DUPLICATE: 356898

| Parameter | Units | 9255597001 Result | Dup Result | Max RPD | Qualifiers |
|------------|-------|-------------------|------------|---------|------------|
| Phosphorus | ug/L | 0.59 mg/L | 542 | 9 | 20 |

SAMPLE DUPLICATE: 356900

| Parameter | Units | 9255481025 Result | Dup Result | Max RPD | Qualifiers |
|------------|-------|-------------------|------------|---------|------------|
| Phosphorus | ug/L | ND | ND | 20 | |

QUALITY CONTROL DATA

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| | | | |
|-------------------------|--------------|-----------------------|----------------------------|
| QC Batch: | WETA/6132 | Analysis Method: | ASTM D516-90 |
| QC Batch Method: | ASTM D516-90 | Analysis Description: | ASTM D516-90 Sulfate Water |
| Associated Lab Samples: | 9255627010 | | |

METHOD BLANK: 357089 Matrix: Water

Associated Lab Samples: 9255627010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Sulfate | ug/L | ND | 250000 | 10/27/09 15:55 | |

LABORATORY CONTROL SAMPLE: 357090

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Sulfate | ug/L | 20000 | 19500J | 97 | 90-110 | |

MATRIX SPIKE SAMPLE: 357095

| Parameter | Units | 9255691017 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------------|-------------|-----------|----------|--------------|------------|
| Sulfate | ug/L | ND | 20000 | 21500J | 107 | 75-125 | |

MATRIX SPIKE SAMPLE: 357096

| Parameter | Units | 9255691017 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------------|-------------|-----------|----------|--------------|------------|
| Sulfate | ug/L | ND | 20000 | 21700J | 108 | 75-125 | |

SAMPLE DUPLICATE: 357093

| Parameter | Units | 9255649005 Result | Dup Result | Max RPD | Qualifiers |
|-----------|-------|-------------------|------------|---------|------------|
| Sulfate | ug/L | ND | ND | 20 | |

SAMPLE DUPLICATE: 357094

| Parameter | Units | 9255649006 Result | Dup Result | Max RPD | Qualifiers |
|-----------|-------|-------------------|------------|---------|------------|
| Sulfate | ug/L | 37300 | 37300J | 0 | 20 |

QUALITY CONTROL DATA

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| | | | |
|-------------------------|------------|-----------------------|----------------------------------|
| QC Batch: | WETA/6082 | Analysis Method: | EPA 353.2 |
| QC Batch Method: | EPA 353.2 | Analysis Description: | 353.2 Nitrate + Nitrite, Unpres. |
| Associated Lab Samples: | 9255627010 | | |

| | | | |
|---------------|--------|---------|-------|
| METHOD BLANK: | 353759 | Matrix: | Water |
|---------------|--------|---------|-------|

Associated Lab Samples: 9255627010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-------------------|-------|--------------|-----------------|----------------|------------|
| Nitrogen, Nitrate | ug/L | ND | 10000 | 10/21/09 10:30 | |

LABORATORY CONTROL SAMPLE: 353760

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-------------------|-------|-------------|------------|-----------|--------------|------------|
| Nitrogen, Nitrate | ug/L | 5000 | 5300J | 106 | 90-110 | |

MATRIX SPIKE SAMPLE: 353764

| Parameter | Units | 9255605029 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|-------------------|-------|-------------------|-------------|-----------|----------|--------------|------------|
| Nitrogen, Nitrate | ug/L | 1.1 mg/L | 5000 | 6480J | 108 | 90-110 | |

SAMPLE DUPLICATE: 353765

| Parameter | Units | 9255605016 Result | Dup Result | RPD | Max RPD | Qualifiers |
|-------------------|-------|-------------------|------------|-----|---------|------------|
| Nitrogen, Nitrate | ug/L | ND | ND | | 20 | |

QUALITY CONTROL DATA

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

| | | | |
|-------------------------|------------|-----------------------|------------------|
| QC Batch: | WET/10168 | Analysis Method: | SM 5210B |
| QC Batch Method: | SM 5210B | Analysis Description: | 5210B BOD, 5 day |
| Associated Lab Samples: | 9255627010 | | |

METHOD BLANK: 353750 Matrix: Water

Associated Lab Samples: 9255627010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|------------|-------|--------------|-----------------|----------------|------------|
| BOD, 5 day | mg/L | ND | 2.0 | 10/26/09 09:30 | |

LABORATORY CONTROL SAMPLE: 353751

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------|-------|-------------|------------|-----------|--------------|------------|
| BOD, 5 day | mg/L | 198 | 185 | 93 | 84-115 | |

SAMPLE DUPLICATE: 353752

| Parameter | Units | 9255625001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|------------|-------|-------------------|------------|-----|---------|------------|
| BOD, 5 day | mg/L | 270 | 244 | 10 | 20 | |

QUALIFIERS

Project: SURRY LINED MSW LF

Pace Project No.: 9255627

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

B2 Oxygen usage is less than 2.0 for all dilutions set. The reported value is an estimated less than value and is calculated for the dilution using the most amount of sample.

C9 Common Laboratory Contaminant.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

R1 RPD value was outside control limits.

Z2 Analyte present in the associated method blank above the detection limit.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company: **Municipal Engineering Services (MESCO)**
Address: **P.O. Box 97**
Email To: **jpfohl@mesco.com**
Phone: **(919) 773-5393** Fax: **(919) 773-1136**
Requested Due Date/TAT: **Standard**

Section B

Required Project Information:

Report #: **Torrell Foul**
Copy To:

Section C

Invoice Information:

Attention: **Section A**
Company Name:

Page:

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Sample Condition Upon Receipt

Client Name: Municipal Project # 9256285Courier: FedEx UPS USPS Client Commercial Pace Other _____Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

| | |
|-----------------|-----|
| Optional | |
| Proj. Due Date: | N/A |
| Proj. Name: | N/A |

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used T060

Type of Ice: Wet Blue None Samples on ice, cooling process has begunCooler Temperature 41°

Biological Tissue is Frozen: Yes No N/A

Temp should be above freezing to 6°C

Comments: samples to 23/55

| | | |
|--|--|---|
| Chain of Custody Present: | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 1. |
| Chain of Custody Filled Out: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 2. |
| Chain of Custody Relinquished: | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 3. |
| Sampler Name & Signature on COC: | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 4. |
| Samples Arrived within Hold Time: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 5. |
| Short Hold Time Analysis (<72hr): | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | 6. |
| Rush Turn Around Time Requested: | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | 7. |
| Sufficient Volume: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 8. |
| Correct Containers Used: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 9. |
| -Pace Containers Used: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| Containers Intact: | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | 10. <u>(vis) travel broken for trip blank</u> |
| Filtered volume received for Dissolved tests | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 11. |
| Sample Labels match COC: | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | 12. <u>no date/time on trip blank</u> |
| -Includes date/time/ID/Analysis Matrix: | <u>W</u> | |
| All containers needing preservation have been checked. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 13. |
| All containers needing preservation are found to be in compliance with EPA recommendation. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Initial when completed |
| Samples checked for dechlorination: | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 14. |
| Headspace in VOA Vials (>6mm): | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 15. |
| Trip Blank Present: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 16. |
| Trip Blank Custody Seals Present | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| Pace Trip Blank Lot # (if purchased): | N/A | |

Client Notification/ Resolution:

Field Data Required? Y / N / N/A

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review:

BKMDate: 10/29/09

December 02, 2009

Mr. Jonathan Pfohl
Municipal Engineering Services
PO Box 97
Garner, NC 27529

RE: Project: SURRY MSWLF-BLANKS
Pace Project No.: 9256285

Dear Mr. Pfohl:

Enclosed are the analytical results for sample(s) received by the laboratory on October 28, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Bonnie McKee

bonnie.mckee@pacelabs.com
Project Manager

Enclosures

cc: Ms. Maggie German, Municipal Engineering Services

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: SURRY MSWLF-BLANKS
 Pace Project No.: 9256285

Charlotte Certification IDs

9800 Kincey Ave. - Ste 100 Huntersville, NC 28078
 West Virginia Certification #: 357
 Connecticut Certification #: PH-0104
 Florida/NELAP Certification #: E87627
 Kentucky UST Certification #: 84
 Louisiana/LELAP Certification #: 04034
 New Jersey Certification #: NC012
 North Carolina Drinking Water Certification #: 37706

North Carolina Field Services Certification #: 5342
 North Carolina Wastewater Certification #: 12
 Pennsylvania Certification #: 68-00784
 South Carolina Certification #: 990060001
 South Carolina Drinking Water Cert. #: 990060003
 Tennessee Certification #: 04010
 Virginia Certification #: 00213

Asheville Certification IDs

2225 Riverside Dr. Asheville, NC 28804
 Connecticut Certification #: PH-0106
 Louisiana/LELAP Certification #: 03095
 Massachusetts Certification #: M-NC030
 New Jersey Certification #: NC011
 North Carolina Bioassay Certification #: 9
 North Carolina Drinking Water Certification #: 37712
 North Carolina Wastewater Certification #: 40

Pennsylvania Certification #: 68-03578
 South Carolina Bioassay Certification #: 99030002
 South Carolina Certification #: 99030001
 Tennessee Certification #: 2980
 Virginia Certification #: 00072
 West Virginia Certification #: 356
 Florida/NELAP Certification #: E87648

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SAMPLE SUMMARY

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|------------|-----------|--------|----------------|----------------|
| 9256285001 | EB | Water | 10/26/09 10:30 | 10/28/09 16:20 |
| 9256285002 | FB | Water | 10/26/09 10:40 | 10/28/09 16:20 |
| 9256285003 | TB | Water | 10/26/09 00:00 | 10/28/09 16:20 |

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: SURRY MSWLF-BLANKS
 Pace Project No.: 9256285

| Lab ID | Sample ID | Method | Analysts | Analytes Reported | Laboratory |
|------------|-----------|----------|----------|-------------------|------------|
| 9256285001 | EB | EPA 6010 | JMW | 15 | PASI-A |
| | | EPA 8260 | MCK | 52 | PASI-C |
| 9256285002 | FB | EPA 8260 | MCK | 52 | PASI-C |
| 9256285003 | TB | EPA 8260 | MCK | 52 | PASI-C |

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ANALYTICAL RESULTS

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

| Sample: EB | Lab ID: 9256285001 | Collected: 10/26/09 10:30 | Received: 10/28/09 16:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|--|--------------------------|---------------|----|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 ICP Groundwater | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | |
| Antimony | ND ug/L | | 6.0 | 2.6 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-36-0 | |
| Arsenic | ND ug/L | | 10.0 | 2.7 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-38-2 | |
| Barium | 20.0J ug/L | | 100 | 0.20 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-39-3 | |
| Beryllium | ND ug/L | | 1.0 | 0.10 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-41-7 | |
| Cadmium | ND ug/L | | 1.0 | 0.50 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-43-9 | |
| Chromium | ND ug/L | | 10.0 | 0.40 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-47-3 | |
| Cobalt | ND ug/L | | 10.0 | 0.60 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-48-4 | |
| Copper | 0.39J ug/L | | 10.0 | 0.30 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-50-8 | |
| Lead | ND ug/L | | 10.0 | 4.0 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7439-92-1 | |
| Nickel | 1.9J ug/L | | 50.0 | 1.7 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-02-0 | |
| Selenium | ND ug/L | | 10.0 | 3.8 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7782-49-2 | |
| Silver | ND ug/L | | 10.0 | 0.10 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-22-4 | |
| Thallium | ND ug/L | | 5.5 | 3.0 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-28-0 | |
| Vanadium | 0.32J ug/L | | 25.0 | 0.20 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-62-2 | |
| Zinc | 6.8J ug/L | | 10.0 | 0.40 | 1 | 10/30/09 09:00 | 11/03/09 03:17 | 7440-66-6 | Z2 |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND ug/L | | 100 | 2.2 | 1 | | 11/06/09 02:29 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 11/06/09 02:29 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 11/06/09 02:29 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 11/06/09 02:29 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 11/06/09 02:29 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 11/06/09 02:29 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 11/06/09 02:29 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 11/06/09 02:29 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 11/06/09 02:29 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 11/06/09 02:29 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 11/06/09 02:29 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 11/06/09 02:29 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 11/06/09 02:29 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 11/06/09 02:29 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 11/06/09 02:29 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 11/06/09 02:29 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 11/06/09 02:29 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 11/06/09 02:29 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 11/06/09 02:29 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 11/06/09 02:29 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 11/06/09 02:29 | 110-57-6 | |
| 1,1-Dichloroethane | ND ug/L | | 5.0 | 0.32 | 1 | | 11/06/09 02:29 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 11/06/09 02:29 | 107-06-2 | |
| 1,1-Dichloroethene | ND ug/L | | 5.0 | 0.56 | 1 | | 11/06/09 02:29 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND ug/L | | 5.0 | 0.19 | 1 | | 11/06/09 02:29 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND ug/L | | 5.0 | 0.49 | 1 | | 11/06/09 02:29 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 11/06/09 02:29 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 11/06/09 02:29 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 11/06/09 02:29 | 10061-01-5 | |

Date: 12/02/2009 12:47 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

| Sample: EB | Lab ID: 9256285001 | Collected: 10/26/09 10:30 | Received: 10/28/09 16:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 11/06/09 02:29 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 11/06/09 02:29 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 11/06/09 02:29 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 11/06/09 02:29 | 74-88-4 | |
| Methylene Chloride | 1.6J ug/L | | 2.0 | 0.97 | 1 | | 11/06/09 02:29 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 11/06/09 02:29 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 11/06/09 02:29 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 11/06/09 02:29 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 11/06/09 02:29 | 79-34-5 | |
| Tetrachloroethene | ND ug/L | | 1.0 | 0.46 | 1 | | 11/06/09 02:29 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 11/06/09 02:29 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 11/06/09 02:29 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 11/06/09 02:29 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 11/06/09 02:29 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 11/06/09 02:29 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 11/06/09 02:29 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 11/06/09 02:29 | 108-05-4 | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 11/06/09 02:29 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 2.0 | 0.66 | 1 | | 11/06/09 02:29 | 1330-20-7 | |
| 4-Bromofluorobenzene (S) | 102 % | | 87-109 | | 1 | | 11/06/09 02:29 | 460-00-4 | |
| Dibromofluoromethane (S) | 95 % | | 85-115 | | 1 | | 11/06/09 02:29 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 94 % | | 79-120 | | 1 | | 11/06/09 02:29 | 17060-07-0 | |
| Toluene-d8 (S) | 96 % | | 70-120 | | 1 | | 11/06/09 02:29 | 2037-26-5 | |

ANALYTICAL RESULTS

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

| Sample: FB | Lab ID: 9256285002 | Collected: 10/26/09 10:40 | Received: 10/28/09 16:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND ug/L | | 100 | 2.2 | 1 | | 11/06/09 02:48 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 11/06/09 02:48 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 11/06/09 02:48 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 11/06/09 02:48 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 11/06/09 02:48 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 11/06/09 02:48 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 11/06/09 02:48 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 11/06/09 02:48 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 11/06/09 02:48 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 11/06/09 02:48 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 11/06/09 02:48 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 11/06/09 02:48 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 11/06/09 02:48 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 11/06/09 02:48 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 11/06/09 02:48 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 11/06/09 02:48 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 11/06/09 02:48 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 11/06/09 02:48 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 11/06/09 02:48 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 11/06/09 02:48 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 11/06/09 02:48 | 110-57-6 | |
| 1,1-Dichloroethane | ND ug/L | | 5.0 | 0.32 | 1 | | 11/06/09 02:48 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 11/06/09 02:48 | 107-06-2 | |
| 1,1-Dichloroethene | ND ug/L | | 5.0 | 0.56 | 1 | | 11/06/09 02:48 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND ug/L | | 5.0 | 0.19 | 1 | | 11/06/09 02:48 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND ug/L | | 5.0 | 0.49 | 1 | | 11/06/09 02:48 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 11/06/09 02:48 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 11/06/09 02:48 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 11/06/09 02:48 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 11/06/09 02:48 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 11/06/09 02:48 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 11/06/09 02:48 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 11/06/09 02:48 | 74-88-4 | |
| Methylene Chloride | 1.4J ug/L | | 2.0 | 0.97 | 1 | | 11/06/09 02:48 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 11/06/09 02:48 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 11/06/09 02:48 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 11/06/09 02:48 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 11/06/09 02:48 | 79-34-5 | |
| Tetrachloroethene | ND ug/L | | 1.0 | 0.46 | 1 | | 11/06/09 02:48 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 11/06/09 02:48 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 11/06/09 02:48 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 11/06/09 02:48 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 11/06/09 02:48 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 11/06/09 02:48 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 11/06/09 02:48 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 11/06/09 02:48 | 108-05-4 | |

Date: 12/02/2009 12:47 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

| Sample: FB | Lab ID: 9256285002 | Collected: 10/26/09 10:40 | Received: 10/28/09 16:20 | Matrix: Water | | | | | |
|---------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 11/06/09 02:48 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 2.0 | 0.66 | 1 | | 11/06/09 02:48 | 1330-20-7 | |
| 4-Bromofluorobenzene (S) | 104 % | | 87-109 | | 1 | | 11/06/09 02:48 | 460-00-4 | |
| Dibromofluoromethane (S) | 96 % | | 85-115 | | 1 | | 11/06/09 02:48 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 94 % | | 79-120 | | 1 | | 11/06/09 02:48 | 17060-07-0 | |
| Toluene-d8 (S) | 94 % | | 70-120 | | 1 | | 11/06/09 02:48 | 2037-26-5 | |

ANALYTICAL RESULTS

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

| Sample: TB | Lab ID: 9256285003 | Collected: 10/26/09 00:00 | Received: 10/28/09 16:20 | Matrix: Water | | | | | |
|-----------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND ug/L | | 100 | 2.2 | 1 | | 11/06/09 03:07 | 67-64-1 | |
| Acrylonitrile | ND ug/L | | 200 | 1.9 | 1 | | 11/06/09 03:07 | 107-13-1 | |
| Benzene | ND ug/L | | 1.0 | 0.25 | 1 | | 11/06/09 03:07 | 71-43-2 | |
| Bromochloromethane | ND ug/L | | 3.0 | 0.17 | 1 | | 11/06/09 03:07 | 74-97-5 | |
| Bromodichloromethane | ND ug/L | | 1.0 | 0.18 | 1 | | 11/06/09 03:07 | 75-27-4 | |
| Bromoform | ND ug/L | | 3.0 | 0.26 | 1 | | 11/06/09 03:07 | 75-25-2 | |
| Bromomethane | ND ug/L | | 10.0 | 0.29 | 1 | | 11/06/09 03:07 | 74-83-9 | |
| 2-Butanone (MEK) | ND ug/L | | 100 | 0.96 | 1 | | 11/06/09 03:07 | 78-93-3 | |
| Carbon disulfide | ND ug/L | | 100 | 1.2 | 1 | | 11/06/09 03:07 | 75-15-0 | |
| Carbon tetrachloride | ND ug/L | | 1.0 | 0.25 | 1 | | 11/06/09 03:07 | 56-23-5 | |
| Chlorobenzene | ND ug/L | | 3.0 | 0.23 | 1 | | 11/06/09 03:07 | 108-90-7 | |
| Chloroethane | ND ug/L | | 10.0 | 0.54 | 1 | | 11/06/09 03:07 | 75-00-3 | |
| Chloroform | ND ug/L | | 5.0 | 0.14 | 1 | | 11/06/09 03:07 | 67-66-3 | |
| Chloromethane | ND ug/L | | 1.0 | 0.11 | 1 | | 11/06/09 03:07 | 74-87-3 | |
| 1,2-Dibromo-3-chloropropane | ND ug/L | | 13.0 | 2.5 | 1 | | 11/06/09 03:07 | 96-12-8 | |
| Dibromochloromethane | ND ug/L | | 3.0 | 0.21 | 1 | | 11/06/09 03:07 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND ug/L | | 1.0 | 0.27 | 1 | | 11/06/09 03:07 | 106-93-4 | |
| Dibromomethane | ND ug/L | | 10.0 | 0.21 | 1 | | 11/06/09 03:07 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND ug/L | | 5.0 | 0.30 | 1 | | 11/06/09 03:07 | 95-50-1 | |
| 1,4-Dichlorobenzene | ND ug/L | | 1.0 | 0.33 | 1 | | 11/06/09 03:07 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND ug/L | | 100 | 1.0 | 1 | | 11/06/09 03:07 | 110-57-6 | |
| 1,1-Dichloroethane | ND ug/L | | 5.0 | 0.32 | 1 | | 11/06/09 03:07 | 75-34-3 | |
| 1,2-Dichloroethane | ND ug/L | | 1.0 | 0.12 | 1 | | 11/06/09 03:07 | 107-06-2 | |
| 1,1-Dichloroethene | ND ug/L | | 5.0 | 0.56 | 1 | | 11/06/09 03:07 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND ug/L | | 5.0 | 0.19 | 1 | | 11/06/09 03:07 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND ug/L | | 5.0 | 0.49 | 1 | | 11/06/09 03:07 | 156-60-5 | |
| 1,2-Dichloropropane | ND ug/L | | 1.0 | 0.27 | 1 | | 11/06/09 03:07 | 78-87-5 | |
| 1,3-Dichloropropane | ND ug/L | | 1.0 | 0.28 | 1 | | 11/06/09 03:07 | 142-28-9 | |
| cis-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.13 | 1 | | 11/06/09 03:07 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND ug/L | | 1.0 | 0.26 | 1 | | 11/06/09 03:07 | 10061-02-6 | |
| Ethylbenzene | ND ug/L | | 1.0 | 0.30 | 1 | | 11/06/09 03:07 | 100-41-4 | |
| 2-Hexanone | ND ug/L | | 50.0 | 0.46 | 1 | | 11/06/09 03:07 | 591-78-6 | |
| Iodomethane | ND ug/L | | 10.0 | 0.32 | 1 | | 11/06/09 03:07 | 74-88-4 | |
| Methylene Chloride | ND ug/L | | 2.0 | 0.97 | 1 | | 11/06/09 03:07 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND ug/L | | 100 | 0.33 | 1 | | 11/06/09 03:07 | 108-10-1 | |
| Styrene | ND ug/L | | 1.0 | 0.26 | 1 | | 11/06/09 03:07 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND ug/L | | 5.0 | 0.33 | 1 | | 11/06/09 03:07 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND ug/L | | 3.0 | 0.40 | 1 | | 11/06/09 03:07 | 79-34-5 | |
| Tetrachloroethene | ND ug/L | | 1.0 | 0.46 | 1 | | 11/06/09 03:07 | 127-18-4 | |
| Toluene | ND ug/L | | 1.0 | 0.26 | 1 | | 11/06/09 03:07 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND ug/L | | 1.0 | 0.48 | 1 | | 11/06/09 03:07 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND ug/L | | 1.0 | 0.29 | 1 | | 11/06/09 03:07 | 79-00-5 | |
| Trichloroethene | ND ug/L | | 1.0 | 0.47 | 1 | | 11/06/09 03:07 | 79-01-6 | |
| Trichlorofluoromethane | ND ug/L | | 1.0 | 0.20 | 1 | | 11/06/09 03:07 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND ug/L | | 1.0 | 0.41 | 1 | | 11/06/09 03:07 | 96-18-4 | |
| Vinyl acetate | ND ug/L | | 50.0 | 0.35 | 1 | | 11/06/09 03:07 | 108-05-4 | |

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ANALYTICAL RESULTS

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

| Sample: TB | Lab ID: 9256285003 | Collected: 10/26/09 00:00 | Received: 10/28/09 16:20 | Matrix: Water | | | | | |
|---------------------------|--------------------|-----------------------------|--------------------------|---------------|----|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | MDL | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV Low Level | | Analytical Method: EPA 8260 | | | | | | | |
| Vinyl chloride | ND ug/L | | 1.0 | 0.62 | 1 | | 11/06/09 03:07 | 75-01-4 | |
| Xylene (Total) | ND ug/L | | 2.0 | 0.66 | 1 | | 11/06/09 03:07 | 1330-20-7 | |
| 4-Bromofluorobenzene (S) | 105 % | | 87-109 | | 1 | | 11/06/09 03:07 | 460-00-4 | |
| Dibromofluoromethane (S) | 94 % | | 85-115 | | 1 | | 11/06/09 03:07 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 96 % | | 79-120 | | 1 | | 11/06/09 03:07 | 17060-07-0 | |
| Toluene-d8 (S) | 90 % | | 70-120 | | 1 | | 11/06/09 03:07 | 2037-26-5 | |

QUALITY CONTROL DATA

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

| | | | |
|-------------------------|------------|-----------------------|-------------------------|
| QC Batch: | MPRP/5303 | Analysis Method: | EPA 6010 |
| QC Batch Method: | EPA 3010 | Analysis Description: | 6010 MET NC Groundwater |
| Associated Lab Samples: | 9256285001 | | |

METHOD BLANK: 358192 Matrix: Water

Associated Lab Samples: 9256285001

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Antimony | ug/L | ND | 6.0 | 11/03/09 01:32 | |
| Arsenic | ug/L | ND | 10.0 | 11/03/09 01:32 | |
| Barium | ug/L | ND | 100 | 11/03/09 01:32 | |
| Beryllium | ug/L | ND | 1.0 | 11/03/09 01:32 | |
| Cadmium | ug/L | ND | 1.0 | 11/03/09 01:32 | |
| Chromium | ug/L | ND | 10.0 | 11/03/09 01:32 | |
| Cobalt | ug/L | ND | 10.0 | 11/03/09 01:32 | |
| Copper | ug/L | ND | 10.0 | 11/03/09 01:32 | |
| Lead | ug/L | ND | 10.0 | 11/03/09 01:32 | |
| Nickel | ug/L | ND | 50.0 | 11/03/09 01:32 | |
| Selenium | ug/L | ND | 10.0 | 11/03/09 01:32 | |
| Silver | ug/L | ND | 10.0 | 11/03/09 01:32 | |
| Thallium | ug/L | ND | 5.5 | 11/03/09 01:32 | |
| Vanadium | ug/L | ND | 25.0 | 11/03/09 01:32 | |
| Zinc | ug/L | 2.0J | 10.0 | 11/03/09 01:32 | |

LABORATORY CONTROL SAMPLE: 358193

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Antimony | ug/L | 500 | 531 | 106 | 80-120 | |
| Arsenic | ug/L | 500 | 495 | 99 | 80-120 | |
| Barium | ug/L | 500 | 492 | 98 | 80-120 | |
| Beryllium | ug/L | 500 | 518 | 104 | 80-120 | |
| Cadmium | ug/L | 500 | 501 | 100 | 80-120 | |
| Chromium | ug/L | 500 | 511 | 102 | 80-120 | |
| Cobalt | ug/L | 500 | 501 | 100 | 80-120 | |
| Copper | ug/L | 500 | 487 | 97 | 80-120 | |
| Lead | ug/L | 500 | 502 | 100 | 80-120 | |
| Nickel | ug/L | 500 | 497 | 99 | 80-120 | |
| Selenium | ug/L | 500 | 491 | 98 | 80-120 | |
| Silver | ug/L | 250 | 269 | 108 | 80-120 | |
| Thallium | ug/L | 500 | 475 | 95 | 80-120 | |
| Vanadium | ug/L | 500 | 505 | 101 | 80-120 | |
| Zinc | ug/L | 500 | 515 | 103 | 80-120 | |

MATRIX SPIKE SAMPLE: 358194

| Parameter | Units | 9255863021 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------------|-------------|-----------|----------|--------------|------------|
| Antimony | ug/L | ND | 500 | 487 | 97 | 75-125 | |
| Arsenic | ug/L | ND | 500 | 463 | 93 | 75-125 | |

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QUALITY CONTROL DATA

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

MATRIX SPIKE SAMPLE: 358194

| Parameter | Units | 9255863021 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|----------------------|----------------|--------------|-------------|-----------------|------------|
| Barium | ug/L | 60.6J | 500 | 499 | 88 | 75-125 | |
| Beryllium | ug/L | 0.24J | 500 | 471 | 94 | 75-125 | |
| Cadmium | ug/L | ND | 500 | 461 | 92 | 75-125 | |
| Chromium | ug/L | 2.2J | 500 | 468 | 93 | 75-125 | |
| Cobalt | ug/L | 175 | 500 | 614 | 88 | 75-125 | |
| Copper | ug/L | 5.0J | 500 | 449 | 89 | 75-125 | |
| Lead | ug/L | ND | 500 | 454 | 91 | 75-125 | |
| Nickel | ug/L | 12.0J | 500 | 459 | 89 | 75-125 | |
| Selenium | ug/L | ND | 500 | 461 | 92 | 75-125 | |
| Silver | ug/L | 0.64J | 250 | 255 | 102 | 75-125 | |
| Thallium | ug/L | 3.1J | 500 | 437 | 87 | 75-125 | |
| Vanadium | ug/L | 4.7J | 500 | 468 | 93 | 75-125 | |
| Zinc | ug/L | 9.2J | 500 | 486 | 95 | 75-125 | |

SAMPLE DUPLICATE: 358195

| Parameter | Units | 9256050013 Result | Dup Result | RPD | Max RPD | Qualifiers |
|-----------|-------|----------------------|---------------|-----|------------|------------|
| Antimony | ug/L | ND | ND | | 25 | |
| Arsenic | ug/L | ND | ND | | 25 | |
| Barium | ug/L | 131 | 127 | 3 | 25 | |
| Beryllium | ug/L | ND | ND | | 25 | |
| Cadmium | ug/L | ND | ND | | 25 | |
| Chromium | ug/L | 10 | 9.3J | 7 | 25 | |
| Cobalt | ug/L | ND | 1.8J | | 25 | |
| Copper | ug/L | 5.8 | 5.3J | 8 | 25 | |
| Lead | ug/L | ND | ND | | 25 | |
| Nickel | ug/L | 6.7 | 5.5J | 20 | 25 | |
| Selenium | ug/L | ND | ND | | 25 | |
| Silver | ug/L | ND | ND | | 25 | |
| Thallium | ug/L | ND | ND | | 25 | |
| Vanadium | ug/L | 17.9 | 16.5J | 8 | 25 | |
| Zinc | ug/L | 19.6 | 26.3 | 29 | 25 R1 | |

QUALITY CONTROL DATA

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

| | | | |
|-------------------------|------------------------------------|-----------------------|--------------------|
| QC Batch: | MSV/8917 | Analysis Method: | EPA 8260 |
| QC Batch Method: | EPA 8260 | Analysis Description: | 8260 MSV Low Level |
| Associated Lab Samples: | 9256285001, 9256285002, 9256285003 | | |

| | |
|----------------------|---------------|
| METHOD BLANK: 362048 | Matrix: Water |
|----------------------|---------------|

Associated Lab Samples: 9256285001, 9256285002, 9256285003

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 11/06/09 01:51 | |
| 1,1,1-Trichloroethane | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 3.0 | 11/06/09 01:51 | |
| 1,1,2-Trichloroethane | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 11/06/09 01:51 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 11/06/09 01:51 | |
| 1,2,3-Trichloropropane | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 13.0 | 11/06/09 01:51 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 11/06/09 01:51 | |
| 1,2-Dichloroethane | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| 1,2-Dichloropropane | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| 1,3-Dichloropropane | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| 1,4-Dichlorobenzene | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| 2-Butanone (MEK) | ug/L | ND | 100 | 11/06/09 01:51 | |
| 2-Hexanone | ug/L | ND | 50.0 | 11/06/09 01:51 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 100 | 11/06/09 01:51 | |
| Acetone | ug/L | ND | 100 | 11/06/09 01:51 | |
| Acrylonitrile | ug/L | ND | 200 | 11/06/09 01:51 | |
| Benzene | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| Bromochloromethane | ug/L | ND | 3.0 | 11/06/09 01:51 | |
| Bromodichloromethane | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| Bromoform | ug/L | ND | 3.0 | 11/06/09 01:51 | |
| Bromomethane | ug/L | ND | 10.0 | 11/06/09 01:51 | |
| Carbon disulfide | ug/L | ND | 100 | 11/06/09 01:51 | |
| Carbon tetrachloride | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| Chlorobenzene | ug/L | ND | 3.0 | 11/06/09 01:51 | |
| Chloroethane | ug/L | ND | 10.0 | 11/06/09 01:51 | |
| Chloroform | ug/L | ND | 5.0 | 11/06/09 01:51 | |
| Chloromethane | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 11/06/09 01:51 | |
| cis-1,3-Dichloropropene | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| Dibromochloromethane | ug/L | ND | 3.0 | 11/06/09 01:51 | |
| Dibromomethane | ug/L | ND | 10.0 | 11/06/09 01:51 | |
| Ethylbenzene | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| Iodomethane | ug/L | ND | 10.0 | 11/06/09 01:51 | |
| Methylene Chloride | ug/L | 3.1 | 2.0 | 11/06/09 01:51 | C9 |
| Styrene | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| Tetrachloroethene | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| Toluene | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 11/06/09 01:51 | |
| trans-1,3-Dichloropropene | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 100 | 11/06/09 01:51 | |

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QUALITY CONTROL DATA

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

METHOD BLANK: 362048

Matrix: Water

Associated Lab Samples: 9256285001, 9256285002, 9256285003

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---------------------------|-------|--------------|-----------------|----------------|------------|
| Trichloroethene | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| Trichlorofluoromethane | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| Vinyl acetate | ug/L | ND | 50.0 | 11/06/09 01:51 | |
| Vinyl chloride | ug/L | ND | 1.0 | 11/06/09 01:51 | |
| Xylene (Total) | ug/L | ND | 2.0 | 11/06/09 01:51 | |
| 1,2-Dichloroethane-d4 (S) | % | 93 | 79-120 | 11/06/09 01:51 | |
| 4-Bromofluorobenzene (S) | % | 104 | 87-109 | 11/06/09 01:51 | |
| Dibromofluoromethane (S) | % | 94 | 85-115 | 11/06/09 01:51 | |
| Toluene-d8 (S) | % | 94 | 70-120 | 11/06/09 01:51 | |

LABORATORY CONTROL SAMPLE: 362049

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 56.7 | 113 | 83-125 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 49.8 | 100 | 80-129 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 52.0 | 104 | 73-127 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 53.1 | 106 | 77-123 | |
| 1,1-Dichloroethane | ug/L | 50 | 51.9 | 104 | 76-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 52.2 | 104 | 78-146 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 58.1 | 116 | 72-125 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 49.9 | 100 | 65-128 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 49.4 | 99 | 81-125 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 57.0 | 114 | 82-126 | |
| 1,2-Dichloroethane | ug/L | 50 | 50.4 | 101 | 72-126 | |
| 1,2-Dichloropropane | ug/L | 50 | 51.5 | 103 | 80-127 | |
| 1,3-Dichloropropane | ug/L | 50 | 52.2 | 104 | 79-124 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 55.3 | 111 | 79-125 | |
| 2-Butanone (MEK) | ug/L | 100 | 99.6J | 100 | 50-134 | |
| 2-Hexanone | ug/L | 100 | 104 | 104 | 58-138 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 100 | 89.5J | 89 | 70-131 | |
| Acetone | ug/L | 100 | 105 | 105 | 50-146 | |
| Acrylonitrile | ug/L | 250 | 218 | 87 | 66-124 | |
| Benzene | ug/L | 50 | 54.1 | 108 | 78-128 | |
| Bromochloromethane | ug/L | 50 | 46.4 | 93 | 73-124 | |
| Bromodichloromethane | ug/L | 50 | 49.7 | 99 | 81-125 | |
| Bromoform | ug/L | 50 | 55.6 | 111 | 71-125 | |
| Bromomethane | ug/L | 50 | 49.6 | 99 | 50-150 | |
| Carbon disulfide | ug/L | 50 | 53.3J | 107 | 54-150 | |
| Carbon tetrachloride | ug/L | 50 | 54.1 | 108 | 81-137 | |
| Chlorobenzene | ug/L | 50 | 56.8 | 114 | 82-126 | |
| Chloroethane | ug/L | 50 | 53.9 | 108 | 69-140 | |
| Chloroform | ug/L | 50 | 48.0 | 96 | 77-129 | |
| Chloromethane | ug/L | 50 | 40.2 | 80 | 54-139 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 52.2 | 104 | 76-133 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 44.8 | 90 | 76-127 | |

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QUALITY CONTROL DATA

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

LABORATORY CONTROL SAMPLE: 362049

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------------|-------|-------------|------------|-----------|--------------|------------|
| Dibromochloromethane | ug/L | 50 | 53.2 | 106 | 77-125 | |
| Dibromomethane | ug/L | 50 | 56.1 | 112 | 77-125 | |
| Ethylbenzene | ug/L | 50 | 55.9 | 112 | 80-127 | |
| Iodomethane | ug/L | 100 | 133 | 133 | 65-172 | |
| Methylene Chloride | ug/L | 50 | 40.6 | 81 | 67-133 | |
| Styrene | ug/L | 50 | 62.7 | 125 | 80-130 | |
| Tetrachloroethene | ug/L | 50 | 51.6 | 103 | 78-128 | |
| Toluene | ug/L | 50 | 51.4 | 103 | 76-126 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 48.2 | 96 | 78-134 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 51.3 | 103 | 75-125 | |
| trans-1,4-Dichloro-2-butene | ug/L | 50 | 52.8J | 106 | 51-140 | |
| Trichloroethene | ug/L | 50 | 53.6 | 107 | 79-127 | |
| Trichlorofluoromethane | ug/L | 50 | 44.2 | 88 | 76-148 | |
| Vinyl acetate | ug/L | 100 | 84.0 | 84 | 50-150 | |
| Vinyl chloride | ug/L | 50 | 41.5 | 83 | 67-143 | |
| Xylene (Total) | ug/L | 150 | 179 | 119 | 83-125 | |
| 1,2-Dichloroethane-d4 (S) | % | | | 94 | 79-120 | |
| 4-Bromofluorobenzene (S) | % | | | 105 | 87-109 | |
| Dibromofluoromethane (S) | % | | | 92 | 85-115 | |
| Toluene-d8 (S) | % | | | 94 | 70-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 362050 362051

| Parameter | Units | MS | | MSD | | MS Result | MS % Rec | MSD Result | MSD % Rec | % Rec | | Max | |
|---------------------------|-------|------------|-------------|-------------|---------|--------------|-------------|---------------|--------------|--------|-----|------|----|
| | | 9256188005 | Spike Conc. | Spike Conc. | MSD RPD | | | | | RPD | RPD | Qual | |
| 1,1-Dichloroethene | ug/L | | | | 47.6 | 60.1 | | | | 23 | 30 | | |
| Benzene | ug/L | ND | 50 | 50 | 47.2 | 56.9 | 94 | 114 | 74-136 | 19 | 30 | | |
| Chlorobenzene | ug/L | ND | 50 | 50 | 45.8 | 58.7 | 92 | 117 | 79-135 | 25 | 30 | | |
| Toluene | ug/L | ND | 50 | 50 | 44.8 | 56.4 | 90 | 113 | 73-131 | 23 | 30 | | |
| Trichloroethene | ug/L | | | | 43.9 | 55.1 | | | | 23 | 30 | | |
| 1,2-Dichloroethane-d4 (S) | % | | | | | | 92 | | 89 | 79-120 | | | |
| 4-Bromofluorobenzene (S) | % | | | | | | 104 | | 110 | 87-109 | | | S0 |
| Dibromofluoromethane (S) | % | | | | | | 92 | | 92 | 85-115 | | | |
| Toluene-d8 (S) | % | | | | | | 96 | | 102 | 70-120 | | | |

QUALIFIERS

Project: SURRY MSWLF-BLANKS

Pace Project No.: 9256285

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

C9 Common Laboratory Contaminant.

R1 RPD value was outside control limits.

S0 Surrogate recovery outside laboratory control limits.

Z2 Analyte present in the associated method blank above the detection limit.